

# SOUTHERN TEXTILE BULLETIN

VOL. VI

CHARLOTTE, N. C., NOVEMBER 6, 1913

NUMBER 10

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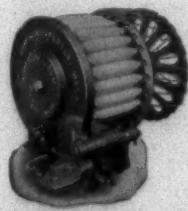
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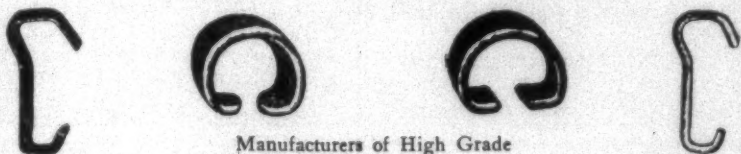
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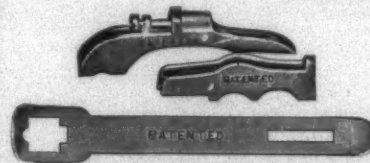
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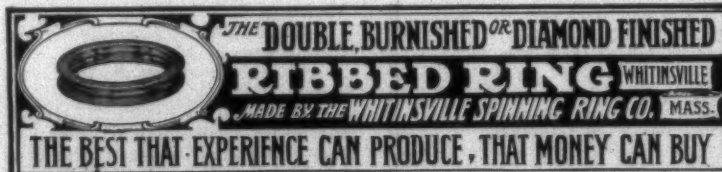
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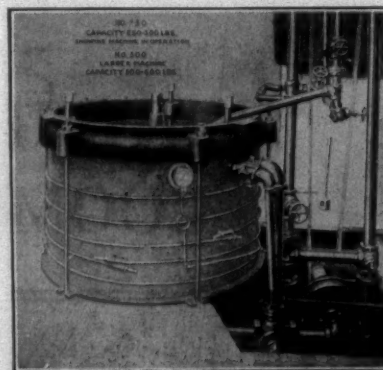
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# SOUTHERN TEXTILE BULLETIN

VOL. 6

CHARLOTTE, N. C., NOVEMBER 6, 1913

NUMBER 10

## *Prosperous Year in Northern China*

The prosperity noted in the reports from Tientsin last year has continued. Building activities were brisk throughout the past year in all the concessions. On the French concession work was begun on an improvement to the bund, by which a point of land which interfered with navigation was cut away and an improved wharf made with reinforced concrete. Work was begun also to improve the bund in front of the Russian concession, which it will take a year or two to complete. All the concessions show a marked improvement in the character of the new buildings erected.

The year opened, however, with gloomy prospects for business in the Tientsin consular district because of the uncertainty and confusion caused by the revolutionary movement. In addition to this—extensive and heavy rains in the summer caused serious floods in the plain region about Tientsin. A number of villages and practically all the crops over a wide area were destroyed and probably a quarter of a million people rendered destitute. But the untiring industry of the Chinese rose triumphant over all these difficulties. The closing third of the year was a period of unprecedented activity, and by the end of 1912 the burned district of Tientsin was practically altogether rebuilt with better structures than those that had been destroyed. An enormous export trade helped to restore normal conditions, as did also the high rate of exchange ruling throughout the period. As a result the year proved prosperous beyond all expectations and the customs collections at Tientsin were greater than ever before in the history of the port.

The total collection of revenue at the customhouse in Tientsin for 1912 was \$2,533,084, being an increase of \$83,259 over the figures of 1911, hitherto the largest amount collected at this port. The amount of import duties shows a slight decrease as compared with the previous year, being \$858,405, as against \$887,196 for 1911. There was also a small decrease in the two items of coast-trade duty and tonnage dues. There was an increase of \$53,342 in the amount of duty collected on

exports. Transit dues inward show an increase over the previous year of \$18,186, while the outward transit dues show an increase of \$70,240. It may be noted here that no opium was imported or exported during the year, and hence there were no collections of duty or if likin on this article.

There was a steady demand for foreign goods during the year. While the value of foreign imports decreased, the actual demand by consumers for foreign goods was much greater than the figures would indicate. At the end of 1911 the warehouses were packed with foreign goods imported during that year for which no market could be found. These, of course, had to be held over during the early part of 1912 until there was an improvement in the political situation. These accumulated stocks were all cleared out, and at the close of 1912 there were merely normal stocks on hand at the warehouses.

A noteworthy feature of the import trade is the rapid increase in the volume of imports of Japanese cotton manufactures, which grew from \$4,296,000 in 1911 to \$5,012,000 in 1912. This increase coincided with a corresponding decrease in importations from other countries. For example, in 1907 the imports of Japanese sheetings were 121,642 pieces and in 1912 637,784 pieces, while American sheetings declined from 1,204,784 pieces in 1907 to 497,790 pieces in 1912.

Another feature of the cotton-goods trade is the beginning of the importation of chintzes and prints from Russia. This trade will probably increase, as the designs are new and apparently very attractive to the Chinese. Another point is that the manufacturers furnish cases containing pieces of different designs—a feature which appeals very strongly to the native dealers.

As a result of the revolutionary movement, there has been a considerable increase in the demand for foreign articles of wearing apparel, especially hats and caps, the value of the imports of which rose from \$1,244 in 1911 to \$117,933 in 1912. There was also an increase in the imports of ready-made clothes, boots and shoes, hosiery and woolen fabrics. Of course, only a few

of the hundred million inhabitants of North China have as yet adopted Western dress. It is the constant remark by tourists who come from southern China to the north that the mass of the people here still wear queues and the native dress, while in the south the reverse is the case.

The importations of cigarettes in Tientsin in 1912 increased nearly 82 per cent. About half of these imports came from Great Britain, about a quarter from Japan and most of the remainder from the United States.

Imports of kerosene were some four and one-half million gallons less than in the previous year, but the actual consumption was the highest on record. At the close of 1911 both the great importing firms had enormous stocks on hand. In the spring the price of oil rose sharply, but dropped to the normal figure during the latter part of the year.

The increase in the export trade of Tientsin to the United States has been a steady one, declared exports in 1910 having amounted to \$6,047,734. The export of oxhides last year was a direct result of a foreign-trade opportunity sent from this office and published in the Daily Consular and Trade Reports. The American firm of S. Zimmerman & Co., which supplies beef to the Russian garrison at Vladivostok, asked this office to put them in communication with purchasers of salted hides. This was late in 1911, and the result was that \$6,540 worth of these hides were shipped in 1912. There has been some inquiry at this consulate general as to the jute grown in northern China, and inquirers have been put in communication, in every case, with firms willing to enter the trade.

The principal decrease was in the item of Manchurian walnuts, exports of which decreased by over \$129,000 in 1912 as compared with 1911. The reason for this is interesting. Inquiry for these walnuts from the United States began in 1910. The demand in 1911 was very heavy—so heavy that orders from the United States could not be filled, and in the beginning of 1911 the merchants in Tientsin sent Chinese buyers throughout the region of

skin rugs, because of a new process for dyeing them. The supply proving inadequate, prices of goat-skins rose from an average of 50 cents to 82 cents, while rugs rose from 75 cents to \$1.04. Dogskin mats were exported chiefly to the United States. These skins came from Manchuria, where dog farming for the sake of the skins is a recognized industry. The increased exports to the United States are due to the demand for cheap fur motor coats and gauntlets. Another item which increased was curios. The Chinese government is considering the question of restricting the hitherto unlimited export of these articles. The increase in the export of peanuts, locally known as groundnuts, is probably due to the opening of the Tientsin-Pukow Railway, which gives facilities for transportation to Tientsin from a region in which these nuts are largely cultivated. Formerly they went by a more indirect route to Tsingtau for export.

There was a satisfactory increase for the year in the amount of foreign goods sent inland, 32,933 transit passes being issued, covering goods valued at \$18,845,991. In 1911 the total value of the goods sent inland was \$18,118,580, under 31,605 transit passes. The bulk of this trade was, of course, in the province of Chihli, the value of the goods sold therein being \$10,500,275. The Province of Shansi took goods to the amount of \$3,613,510; Kansu, \$1,982,991; Honan, \$1,354,784; and Shantung, \$890,587. The total value of inland goods brought into Tientsin for export during 1912 was \$13,743,220, of which \$3,023,863 worth came from outside the Great Wall through Kalgan. This is an increase of 50 per cent over the trade from the same region in 1911, due to the increased trade in oil-bearing seeds and to the better railway facilities.

During the navigation season of 1912 there were 908 entries of steamers, with a cargo tonnage of production to purchase the crop before it was ripe for delivery. The Chinese, eager to realize the increased prices, thrashed the nuts down from the trees while the kernels were still in the milk and threw them on the market as early

(Continued on Page 18)



# Methods of Cleaning Fires

(Courtesy of Clinchfield Fuel Co.)

## General Remarks.

Good fires are the first requisite to economical operation of steam-boilers.

To keep hand fires in good condition, they must be properly cleaned at regular intervals. The length of these intervals depends on the rate at which coal is burned and on the percentage and character of the ash; it also depends on the size of the air openings in the grate; the larger the openings the less frequently the fires need to be cleaned. Under average conditions, the interval between cleanings when burning Clinchfield coal is about 12 hours. When air spaces in the grate are small or when the rate

## CHAPTER I.

### Proper Tools for Handling Fires.

Figure 1 shows a set of three tools for handling fires. The set consists of a rake, a slice-bar and a hoe. The bodies of these tools should be made of iron pipe, which construction makes them light and strong. Any blacksmith with average skill can make them. They cost about \$6 for the set of three.

The rake is perhaps the most useful tool in the fire-room. It is used in breaking and leveling the fires. By its judicious use many a ton of coal can be saved.

The slice-bar is useful in shoving the burning coal to one side of the grate before cleaning fire. After the

3x½ in. and welded to the pipe.

Galvanized iron pipe should not be used.

## CHAPTER II.

### Side-Cleaning Method as Applied to Two-Door Furnaces.

Figures A to J show this method applied to two-door furnaces. The cleaning is done by removing the refuse from one side or half of the

grate undisturbed.

Fig. C.—When the good coal has been pushed back far enough as shown in Fig. A, the fireman should take the paddle-shaped slice-bar and with two or three sweeping strokes scrape the good coal from the rear of the right half onto the left half of the grate. The strokes are similar to those of an oar when rowing a boat and are indicated by the arrow in Fig. C, the slice-bar resting against the side edge of the fire-door frame.

Fig. D shows the grate when all the coal has been pushed from the right half and the ash and clinker are ready to be pulled out. If the clinker adheres to the grate it can

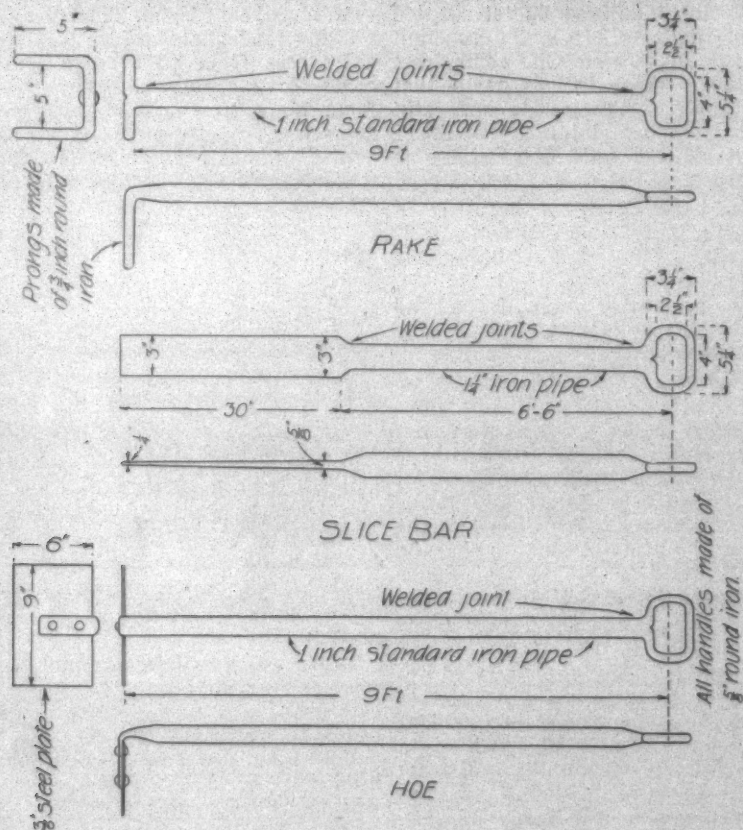


Fig. 1.

of combustion is high, cleaning of fires may have to be done every six hours.

Cleaning of fires in order to be effective must remove all ashes and clinker from the grate; that is, it should remove all the refuse that for any reason cannot fall through the grate.

A day's run should be started with thoroughly clean fires. If another cleaning must be done during the day, it should be done shortly before noon, or at a time when the load on the boiler is reduced.

For double-door or single-door furnaces fired continuously, we recommend the side-cleaning method as the most effective.

In all of the illustrations the motions of the tools are indicated by the arrows.

ash and clinker are pulled out with the hoe the slice-bar can be used again to move the burning coal onto the cleaned half of the grate.

The hoe is useful for pulling ash and clinker out of the furnace when cleaning the fires. It is also used to advantage to move the burning coal to one side before or after cleaning the fires, and to clean the ash-pit.

By taking reasonable care of the tools they can be made to last a great many months and even years. The rake should always be laid down on its back.

Lengths of tools as given on opposite page are for furnaces having grates 6 feet deep; lengths of tools for furnaces having other depths of grate should be changed accordingly.

The paddle of the slice-bar should be made of flat iron 3x½ in. or

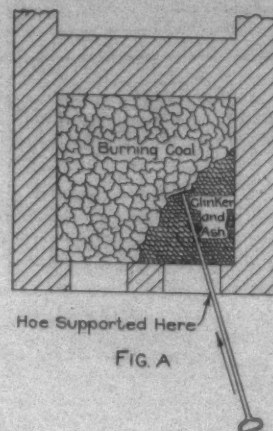


FIG. A

grate at a time. During the cleaning of a fire the damper between the boiler and the breeching should be closed.

Fig. A.—The fireman takes the hoe and with a motion indicated by the arrow pushes the burning coal from the front part of the right half of the grate towards the rear, and as much onto the left half of the grate as possible, taking care not to disturb the layer of ash and

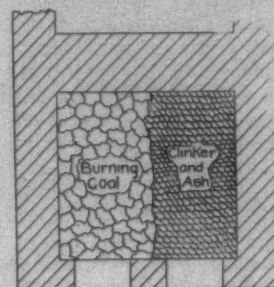


FIG. D

be loosened by running the slice-bar under it and pushing the handle downward. In case the adhering clinker is soft it is well to wait three or four minutes before attempting to loosen it; these few minutes may be sufficient to cool

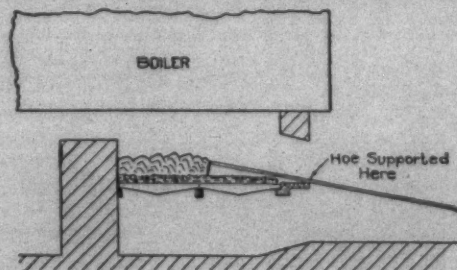


FIG. B

clinker under the coal.

Fig. B.—In pushing back the burning coal the hoe should be supported on the lower edge of the

and harden the clinker so that it can be loosened more easily.

Fig. E.—After loosening all the

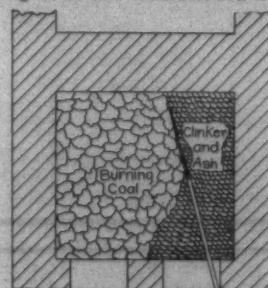


FIG. C

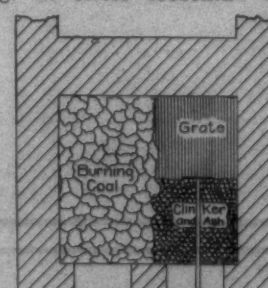


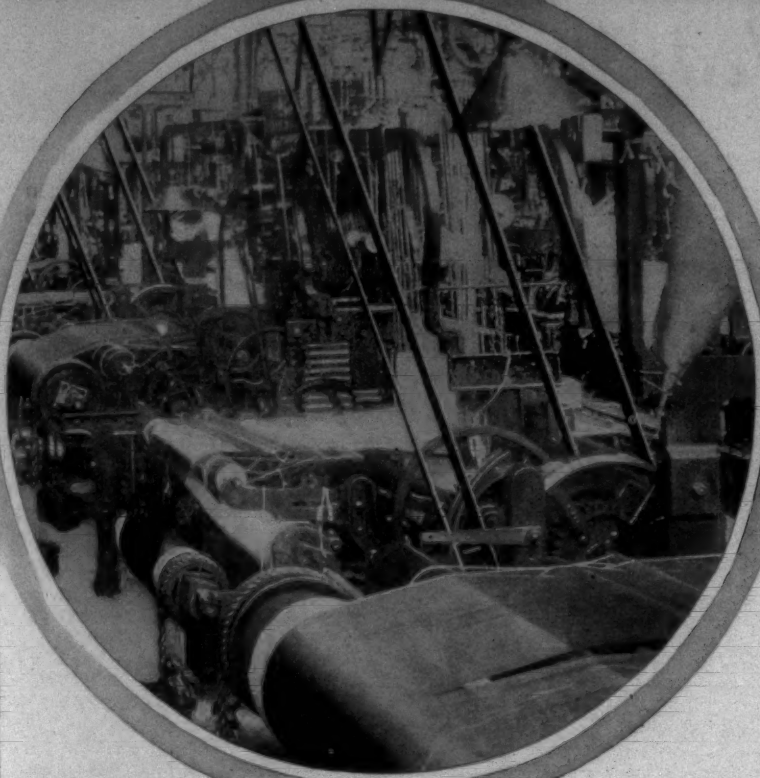
FIG. E

ported on the lower edge of the fire-door frame so that the layer of ash and clinker will remain on the

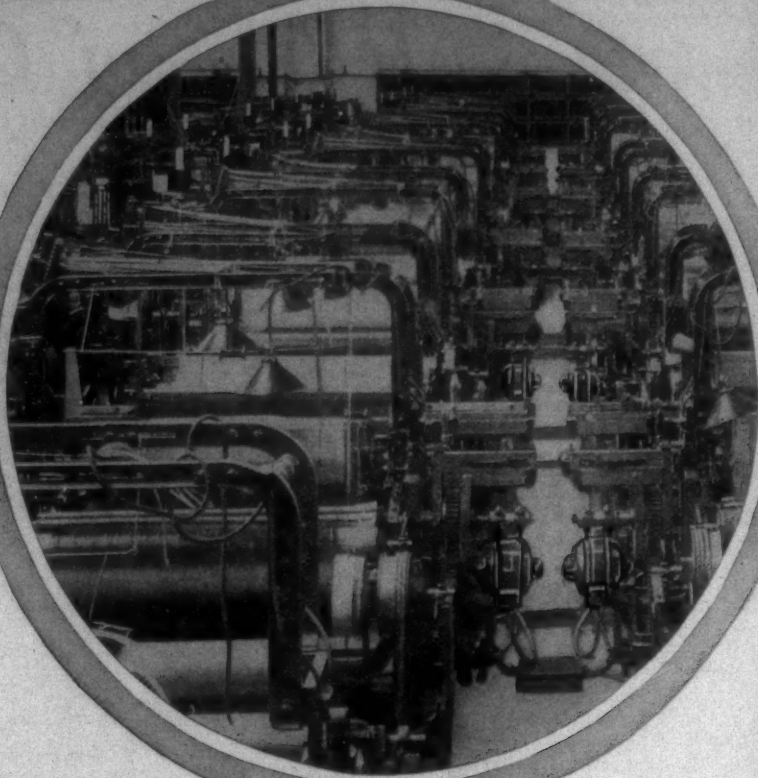
clinker the fireman should take the hoe and pull all the clinker and ash from the rear to the front of the grate undisturbed.

(Continued on Page 16.)





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# Care and Operation of Roving Frames

## Contest Begins.

In this week's issue we begin the series of articles which have been contributed to the contest for the best practical paper on "Care and Operation of Roving Frames."

Twenty articles have been contributed up-to-date and we expect a number of others before Nov. 15th which is the best date upon which articles can be mailed and be considered in the contest.

We have selected seven practical mill men as judges of the contest. They are located at different points in the South and do not know the names of the writers or of the other judges.

When the contest is closed these articles will be published in book form and two copies given to each one who has contributed an article.

## Number One.

I am glad to contribute an article to the contest on the "Care and Operation of Roving Frames," and presume that the subject includes slubbers, intermediates, fine and jack frames. I will not attempt to select any particular build of frames, as they will all give good results if properly cared for. I will deal with roving frames in rotation.

The slubbers will receive first consideration, and for good results should be properly erected when installed. The overseer should watch the work and see that all frames are well lined and leveled, and that all parts, gears and bearings are properly adjusted. When a sample of the roving has been built, see that it possesses the desired lay, stoke and taper. Devote the same attention to each spindle as you do to the entire number of spindles to be operated and when a frame has been put in motion with all ends up, see that it does not consume more power to drive the machine than is necessary for a like number of spindles. For instance, if a machine stops very suddenly when the belt is shifted to the loose pulley, as if something had caught

in the gear, it is evident that the machine is running very hard and needs immediate attention from a competent man.

Next and most important is the quality and quantity, and above all get quality of production. To do this it is necessary to have good even drawing sliver. I have assumed that the men contributing to this contest are men who understand the rudiments of draft and twist, so will simply say that the draft and twist should be governed by local conditions, staple of cotton and hank roving desired. I do not approve of the method, as practiced by some men, of an excess draft on roving frames. Under draft is equally as bad, so have the draft, twist, lay and tension to meet the requirements of a well organized card room. Space the rolls for the staple of cotton being used, say for slubbers on 7-8 inch staple, set the middle steel roll front with gauge in the stand, so that while the middle set of rolls are holding the extreme ends of the fibres, it will be within 1-8 inch of being delivered to the front set of rolls.

I have been advised to set one inch center to center of the rolls on 7-8 inch cotton, but actual tests show that it cannot be done successfully. Then space the middle roll to the back to that while the back set is still holding the extreme ends of the fibres, it will be within 3-16 of an inch to delivering to the middle set of rolls. Now, if you will consider the rolls in operation for the fraction of a second the answer to holding and delivering the staple is obscured. The above spacing for slubbers when there is more stock in bulk there than in any other roving process, and based on 7-8 inch staple. When inch staple is being used, rolls should be set in the same proportion and vice-versa.

The same spacing on top leather rolls will give good results. Be sure that the leather rolls are kept in good condition and not allowed to run against the top cots or without oil. Keep the flyers well balanced and the presser fingers in proper relation to the bobbins. See that the spindles turn freely, in steps and bolsters, and have spindles and bobbin gears meshed so they will not skip or bounce while in motion. Have the slubbers build bobbins of uniform length and avoid waste at the intermediate creels. Do not allow the attendant

to put extra twist at any process when piecing ends, and teach them the bad results incurred from this. Do not let the hands fan or blow off the frames, but teach them to keep them in a clean condition by wiping them off at all times. If the above suggestions for care and operation of roving frames are followed, then you will have paved the way for successfully operating roving frames.

The next process for consideration is the intermediates which have the same effect as the slubbers, that is condensing and getting the roving in more convenient form for handling. So assuming that we have a creel of good slubber roving to begin with and that the frame has been geared up, keeping in mind that the stock being handled at this point is in a more condensed form, being more yards in less weight, teach the attendant to avoid long ends on creeling and to prevent lumpy work from being delivered. An end broken too short allows a singling light place in the roving. Teach the attendants to avoid unnecessary waste, making them particularly understand that you will not stand for cut roving at any process. Emphasize especially that you want the clearer boards picked off four times daily to keep this waste from getting into the work. Keep the rolls in good condition, and properly spaced to meet the requirements. The same practice that applies to slubbers, mechanically speaking, applies to all frames in the roving process.

When frames are run continually, they should be cleaned up once in every four or six months, the rolls taken out and scoured and the necks examined. If any loose ones are found, they should be tightened. When the condition of the machines require it, they should be gone over thoroughly by a competent man once a year and all parts made level, all badly worn gears and bearing replaced with new ones, spindle steps tightened, bolsters mopped out and set. All shafting couplings should be examined and tightened. Keep all the casing adjusted to the brackets, not allowing any to be taken off or discarded. Have cone belts at a point on the cone to avoid stretching the roving, but do not allow the roving to coil top of flyers. Prevent this by changing the small gear on the bottom cone if necessary. Examine the full bobbins occasionally

to see if they are perfect in build. Look after the actual tension while the frame is in motion by placing a pencil under an end and gradually pulling it two or three inches.

If it takes up with a bound, the tension is too tight, but if it takes up gradually as it is being pulled outward, it is a safe bet that you are not stretching the roving.

In all cases use two cone belts, either a follower or a rider and do not have piecings from cone belts breaking. The next process is fine frames. The principle is the same as in the previously mentioned machines, condensing and putting the roving in more compact form for handling. To operate these machines properly, do not attempt to have the jack shaft running at too high a speed. For fine frames, from 350 to 400 R. P. M. and for jack frames from 425 to 500 R. P. M. are good speeds. This is another point that is governed by conditions. I think it best to run spindles on fine frames from 1,100 to 1,250 R. P. M. and on jacks from 1,400 to 1,600 R. P. M., after making sure that all parts of the frame are well lined and leveled and that all gears and bearings are in good condition and properly set. By properly set is meant just what the word implies; for instance, that all gears and bearings are in good condition and set in position to give the results intended by the builders. To render these machines efficient, do not allow some jackleg fixer to change the combination of the lay, and tension by putting on the gear most convenient to him, or run only one hank roving. It is important to see that all are geared alike, otherwise bad running frames and unevenly built bobbins of roving are the bad results.

Oiling at the right time and place is very essential to the long wear and care of roving frames. Use a good oil that will lubricate well and have all fast gearings and bearings oiled twice each day and slow moving parts once a day. To get the best results with solid back top rolls, and shell rolls in front, have the back rolls oiled twice a week on fine work and three times a week on coarse work. Examine the frames personally at times, by stopping them and starting them up and you may detect some surface trouble. Also look over the compound and after stopping the frame, look out for lost motion or back lash. Do not allow bearing

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to run hot for lack of oil or by getting out of line. When you have more than one hank roving in a room, it is desirable to have bobbins painted at the top as a marker. Also use crayon for each operative to locate bad work. I will add that I do not pay help to produce bad work, such as doublings and singlings. Avoid using broken or split bobbins, especially on fine work, as they are the root of considerable bad work. Do not place a first-class slubber tender on jack frames and fine work and expect good results and fine production, as it requires practice to get the best. Keep the best fixer you can find on the frames, one who will get results and can see things before they fall on him. Usually a frame will not break without a cause, so when you have a roving frame where the ends are continually coming down, investigate the cause. Avoid changing fine frames to real coarse work before going over them and putting them in perfect condition, replacing top rolls with new ones. See that the roving traverse motion is in perfect working order and traverses the roving within 1-8 inch of each end of the top rolls. I take special pride in having my rolls brushed off four times daily, flyers picked at each doff, spindles and backs cleaned each day. Have the ereels looked over and kept in line, discard broken or bad skewers, do not allow them to run with nails driven in the ends. When you have some poor frame hand trying to break off his shifter handles because an end has come down, get that fellow off the job. I teach my help obedience and perseverance. I am paying for their services, and they belong to me. Roving frame help is the most transient of the day.

#### Number Two.

The first thing in mind is good oiling. All parts should be well oiled on Monday morning. The compound gears, gears in horse-head train, spindle drive gears, jack shaft, loose pulley, and jack gear over twist gear should be oiled every morning; cones and draft gear studs and lay driving gears need only be oiled three times per week on Monday, Wednesday and Friday; lifter shaft once per week and steel rolls twice per week. The top leather rolls should be oiled once a week and shell rolls once a month. Spindles should be oiled twice per week on every Monday and Thursday morning. There is no need of oiling steps over once a month, provided you use the proper oil for this purpose. Steps and rolls should be oiled with a non-fluid oil; a good engine oil will do for all other oiling. If your frames are in line and level, you will not have to oil any oftener than this. Of course, if your frames are out of line and level, you cannot oil them enough, for they will stay hot, stuck-up and broken down all of the time. Here is the reason that steps run dry so often. If the carriage is not level, the spindles will bind in the steps. A lot of fixers when they have a bolster broken, will get another one, which sometimes will not fit the rail and correspond with the step like it ought to. Probably it needs a small piece of pasteboard between it and the rail or a little filing, but they will not use either one. Instead they put it in when it binds in the step, and let it go. That step

calls for more oil and also more power for that frame. A few things like this bolster calls for a tighter drive belt, which will burn up and wear out your jack shaft and bearings; then the jack shaft will get to jumping up and down, break the son wheel, and probably break the teeth out of the jack gear over twist gear. Such things as these run up the carder's supply bill and cut his production.

Do you ever have any steel rolls to break? The cause for their breaking is usually because the frame is out of line and level, and the steel rolls are not oiled as they should be. The necks of the rolls wear and the bottom of the stands also wear. Of course, if they wear one-eighth of an inch each, that is equal to one-quarter of an inch out of level with the other necks in the roll. Considering the heavy weight on the roll, it is in a strain for the weight will hold the neck down in the bottom of the stand. Then it will be out of level one-quarter of an inch.

Tangled roving is another important thing. Now for the causes: Sometimes it is caused by not running enough twist. If you do not run plenty of twist, you are bound to run a slack tension on your ends to get them to stay up. If you are running plenty of twist it must be something else that is tangling your roving. Next, every time a frame hand wraps an end around the presser finger once, it will tangle. Sometimes the taper needs changing one tooth; sometimes the tube in the flyer needs to be cleaned out, so it will go down on the spindle tight and not raise up. That will cause some tangled roving. Another cause is that the fixer will not change the tension when he ought to and when the frame hand takes up the slack on his ends, there is some tangled roving. Besides these things mentioned, there are a great many more causes for tangled roving.

How often do you clean your steel rolls? Do you wait for a hard cake to form in the bottom of the stand and the roll to quiver, or do you clean them once every nine or twelve months? The quivering of the rolls will cause what we call cut roving. Cut roving can also be caused by the draft gear being set too deep. Never allow the frame hand to put in his shell rolls, for there are few section men who know how to pair up shell rolls. Two shells on the same mandrel ought to be the same size. We know that rolls vary from one-eighth to three-sixteenths of an inch, and sometimes more; one small one and one large one together will cause more cut roving.

Particular care should be taken to see that the roving traverse is making its longest stroke without running the ends out from under the ends of the rolls. The frame fixer should go around twice each day and examine the roving traverse on all frames to see if it is in good working order, for it only takes one a short while to ruin a set of rolls and cause lumpy work.

The elimination of hard ends is another very important thing in the card room. First start at the slubber hand and teach him how to put up ends without making hard ends, and see that he does it. Then see your intermediate hand, and ask him if he gets any hard ends. If he says no, then ask your fly frame hands; if they so no, ask the jack frame hands. If the jack frame hands are not getting hard ends, you

can count on it that you won't have to use so many new rolls. The saving of rolls is quite an important item in the supply bill, and at the same time the fewer rolls you use, the greater your production must be.

Cleaning is a very necessary thing around roving frames. On coarse numbers, rolls should be cleaned twice per week; backs twice per week and spindles every day; roller beams twice per day; head end and carriage twice per day. Of course, on fine numbers so much cleaning is not necessary.

Every overseer should know how much draft to run. Never get your drafts too long if you want the best running work. Excessively long drafts will cause thick and thin places in the roving, which will give the spinner lots of trouble.

About the most important thing around frames is a good fixer. He will save a lot of gears and, of course, run a better production than a poor fixer. If a frame hand sees anything wrong with a frame he will tell a good fixer, knowing that the frame will be fixed in a few minutes. Should there be a poor fixer on the job, the frame hand will let the frame run on, knowing that a poor fixer will more than likely keep the frame stopped all day.

W. J. E.

#### Number Three.

All roving frames are similar in construction, whether they be slubbing, intermediate, or fine roving frames. Each of them may be considered as drawing frames, as they are for the purpose of reducing the size of the sliver gradually finer and finer without using too large a draft in any one place, and at the same time to afford a chance of doubling at the intermediate roving frames and jacks essentially necessary for producing a good yarn. The slubber is for making coarse roving, and is the first machine to give twist for increasing the strength of the roving. In mills on the coarser number the slubber and fly frames are the only roving machines required. In mills on No. 20s to 40s yarn, the slubber, intermediate and fly frame are used, while on still finer numbers the slubber, intermediate, fly frame and jack frame are necessary. The work should be made to run well so that there will be as few piecings as possible, and what piecings are made should be made at the front roll instead of at the bobbins. A roving frame has more bearing surface than any other machine in the mill, and for that reason should receive more careful alignment and oiling than any other. Not only does the lack of oil cause friction and a waste of power, but is the most fruitful cause of break downs and consequent loss of production. The average fixer and frame hand fails to consider the importance of keeping oil holes free of choke, all bearings well oiled and gears and spindles properly set and adjusted to the best running conditions. Excessive speeds for frames are not favored by the best carders. Even as a matter of economy, looked at from every point of view which occurs to experience the wear and tear in the end and often discounts all the apparent advantages of production, even with the best machinery and expert help. The following speeds will prove very satisfactory.

Slubbing spindles—  
500 to 600 R. P. M.  
Intermediate spindles—  
800 to 900 R. P. M.  
Roving spindles—  
1,000 to 1,200 R. P. M.  
Jack spindles—  
1,100 to 1,300 R. P. M.

#### Twist.

Under this head, I will say that no carder of experience imagines that in making good roving or any description he can work from January until December with the same twist on the same counts. The cotton and the weather demand adjustment of the twist from time to time, and to give close attention to this as well as to good drawing, in all of the processes, forms an important factor in the successful spinning of roving and good yarn. On coarse numbers, when weather conditions are favorable, a little less than standard twist can be used, while in warm, muggy weather, it is advisable to run two or three teeth more than standard. On fine numbers it is never best to run below standard twist when weather conditions are most favorable unless the staple of the cotton is extra good, while in dog days it will be found economical to put in two to four more teeth than standard. While some carders use as a multiple for getting twist 1.2, I find here in the South that 1.25 suits general conditions. Rule: Multiply the sq. rt. of the number of roving by 1.25 which will equal standard twist per inch for roving. In general the rule is to add 1-8 in. to the length of the staple for setting front and middle rolls. That is, one should set these rolls so that from center to center they will be 1-8 in. farther apart than the length of the staple. This, however, is one of the most important points in producing a good strong yarn. The back and middle rolls on some makes of roving machines are not adjustable and are set 1 1-2 in. from center to center. This generally will open up the stock sufficiently for the front and middle roller. Should this not be sufficient, then one tooth more draft can be added between these rolls, which is called the brake draft. However, one has to use his judgment in setting the front and middle rolls as the distance from center to center depends on the length of staple, and amount of draft, the amount of twist, the kind or character of the cotton—whether harsh and wiry or smooth and silky, and weight and density of the drawing or roving and the speed of the rolls. On frames where each roll is adjustable, the following setting will be found to give good results on 1 3-16 in. to 1 5-16 in. staple cotton:

	1st to 2d	2d to 3d
Slubbers	1 1/2 in.	1 1/2 in.
Intermediates	1 1/2 in.	1 1/2 in.
Fly frames	1 1/2 in.	1 1/16 in.
Jacks	1 1/2 in.	1 9/16 in.

Below will be found a very satisfactory list of drafts for different roving frames:

	Draft.
Slubber	3 1/2 to 4
Intermediate	5 to 5 1/2
Fly frames	6 to 6 1/2
Jack	6 1/2 to 7

The lay is proportioned to the square root of the number of roving, and is found by multiplying the square root of the number of roving by 1.2, which will equal the number of strands per inch laid around the bobbin.

(Continued on next Page)



**Tension.**

This should receive constant attention and care from frame hand as well as overseers as weather conditions will affect the tension of a frame. If not promptly attended to the roving will be strained and a loss of production will result. Frames should be so adjusted that the tension will not have to be altered during the run of a set. On line numbers all new bobbins should be gauged, and all over and under-sized bobbins discarded, thus insuring an even tension at the starting of a set. Top rolls should be picked once each day. Steel rolls cleaned twice each week. Mique and back rolls should be oiled twice each week with a good non-fluid oil. Wane top and front steel rolls should be oiled regularly once each day. Where steel front rolls are used, rolls should be unweged and taken out of frame each Saturday. Rippers taken out, wiped and cleaned. First thing each Monday morning, spindles should be oiled and rolls reweighted. Only 24 oz. best roller cotton and the best quality spindles should be used in covering top rolls. Moving traverses should be kept in running order, otherwise a bonowed out roll will result.

**Care and Attention.**

The carriage should be kept level, flyers balanced, all bobbins and spindle gears properly set, thereby doing away with jumping spindles and bobbins, worn out gears and strained roving. Every six months there should be a general cleaning of top and bottom carriages. Carriages should be well cleaned and leveled, all bearings well greased and rollers scraped out, and spindles plumbed. Steel rolls scoured with card clothing, roller stands cleaned and lined up, examined and well greased, cap bars and rolls gone over, all bad rolls taken out and gears in head cleaned, examined and well oiled. Spindle sockets on flyers should be kept clean at all times, thus eliminating flyers spinning around loose on spindles, tangled work, torn up flyers and pressers. Top and under clearers should be re-covered when worn slick, and should be picked every two hours.

**End Piecing.**

In piecing up an end the frame hand should only twist the end just enough to be able to draw it through the flyer and never moisten the fingers in making the splice as too much twist and wet piecing causes hard twisted ends, which ruin rolls and cuts production.

**Creeling.**

In creeling the frame hand should be very careful not to let singles go through and when single or double is made be sure and remove same from the bobbin. They should never be allowed to pull off more than one-half layer of roving from bobbin when creeling. They should be allowed a reasonable amount of waste each day, and no more, an account being kept of same.

**Doffing.**

In doffing each frame hand should pick or fan off the flyers before kinking ends. All roving should be marked before taken off of spindles thus having a check on all bad work.

Spindles and bobbin gears should be oiled first doff each morning, steps once every two weeks, all fast parts and compounds once per day, all show parts once a week, lifting

shaft, weight chains and chain pulleys once a week.

**Conclusion.**

In conclusion will say that a frame hand cannot be made in a week, but in order to be a good frame hand it takes months of careful watchfulness and painstaking, coupled with speed and good judgment, to produce a good roving and get the production under various conditions. Practical.

**Number Four.**

Today we are entering into a new era in cotton manufacturing in this country. The Simmons-Underwood tariff bill has been passed and we will have to compete with foreign manufacturers of cotton goods in a far greater degree than we have ever done before. Prior to this time we have only had coarse goods and yarns to compete with, but with the advent of the new tariff bill, the finer counts of yarns are also on the list of goods in which foreign goods enter into competition. Perhaps you will say that I am getting out of my subject in speaking of the tariff and foreign competition, but if I am doing so, it is an effort to show the importance of the subject, "The Care and Operation of Roving Frames." Perhaps, some men do not realize the significance of the part that the roving frame may be called upon in meeting foreign competition. How did we compete on coarse yarn, by increasing our production and cutting down the cost. Surely, but how was it done? Generally it was accomplished by cutting out one process of roving frames, and using single roving on spinning. Now here is where the importance of the care of roving frames comes in meeting competition. If we can run 35 and 40 on single roving, we could also run 40 and 50s on single roving, if we had the right kind of roving. What is the object of using double roving anyway? Is it not to get more even yarn? Now from this it will appear as if it has been considered impossible to run even roving or else we have been using a method that was useless and an added expense. A few years ago almost all of the mills were using three processes of drawing but now we find very few mills using more than two, and some use only one. Still the work is as good, as is supposed to be, as when we were using three processes.

The primary object in the care of a roving frame should be to get good work, which you can never do if you do not give the frames the proper attention. First, we must have the proper setting of the rolls for the stock being used. Second, we must have good easy running top leather rolls. We cannot have these if we allow them to become gummed up with dirt and neglect the proper oiling of saddles and ends of rolls. Personally, I prefer steel rolls as there is little danger of their getting gummed from dirt and lack of oil, and even if the cost is greater at first, they are cheaper in the long run in the reduced cost of covering. Third, we must have the right tension on the roving as it is being wound on the bobbin. If the tension is too tight, it will stretch the roving and make it uneven. Fourth, we must have enough twist to enable the roving to be pulled off the bobbin without stretching. If the twist is not great

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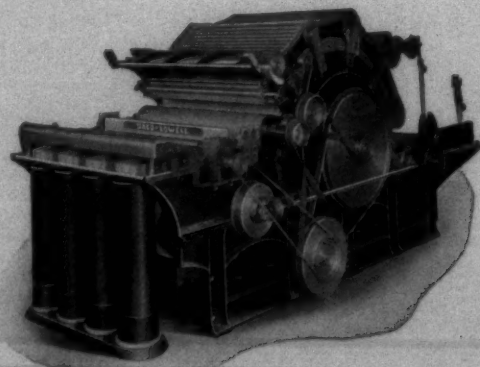
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This flash-light photograph, taken in one of the Clinchfield Mines in Southwestern Virginia, shows the third step in the mining of coal by modern methods. The seam was first undercut by an electric mining machine, then holes were drilled and light charges of powder touched off. Now, the smoke has cleared away through the ventilation chambers and the miners are engaged in picking down the coal and preparing it for loading into the mine cars.

These miners are 150 feet below the surface of the earth, a

mile or more from the nearest mine opening and five or six miles from their homes. Mining coal is hazardous work and the inducement is good wages. Good men can earn from \$3.00 to \$10.00 a day. Every known safeguard has been provided for their protection while underground. The company has erected neat and attractive homes, good schools and churches and places of amusement for their improvement and contentment. A vast expenditure is necessary to maintain a community of 15,000 people in this manner.

Adv.

enough the roving will run off heavy when the bobbins is first put in, making the yarn lighter on account of the added draft between bobbin and back roll. As the bobbin of roving decreases in size, the yarn increases in weight. One of the reasons of using double roving is that the two bobbins, being of different sizes, are supposed to equalize each other in stretching. If a full bobbin is set in with one that is half full they will balance each other. Fifth, the roving must be placed upon the bobbin so as to be easily handled without becoming tangled. Having mentioned some of the requirements of good roving, we will turn our attention to the frame itself.

No fixed rule can be given for roll settings as this is governed by three factors, the length of the staple being used, the amount of twist that is being used in the stock that is being fed in by the back rolls, and the weight of the stock being used. This last factor is one that is often overlooked by carders and second men, but is of great importance. We cannot use a 30-hank

slubber roving with the same setting that we use for a 60-hank slubber roving and get good results, the length of the staple being the same. We will have to set the rolls further apart for the heavy roving than for the tighter. Also in using a tight twist or slubbers or intermediates, we should have to set further than if using a loose twist to give the fibres a chance to pull themselves apart. From these reasons it can be readily seen that no fixed rule can be given for setting the rolls. Experience and good judgment are absolutely necessary in setting rolls to the best advantage. After getting a good setting for the stock and weight being used, there should be no further trouble at this point.

#### Twist.

The amount of twist should be enough to let the roving be pulled off without stretching. The square root of the hank roving multiplied by 1.2 will be a good average to go by. For very short staples it should be more, while for Sea Island and long staples, it can be less. A good

rule is that after putting in standard twist, set four bobbins of the roving in the next frame and make a sizing to see what weight roving or yarn it is making. Let this run down to about three-quarters full. Weigh the yarn again, let it run to half full, make another weighing, and then weigh from a bobbin one-quarter full. By comparing the weights of all four bobbins, you can tell if the roving is stretching in being pulled off.

The frames should have the tension regulated so as to have the same tension from start to finish. Some men will say that this is impossible but it can be done and it does not pay to depend entirely on catalogues to get the gearing. After putting on the tension gear and finding that it is too loose, put on a tooth smaller. If it is too tight after changing, do not think that you cannot get the tension right. Possibly the trouble is in the lay gears. Take out one tooth of the lay gear and try the first tension gear. If it still fails, try moving the starting point of the cone belt backward or

forward, as the case may be. If the doff starts off tight, move the cone belt starting point forward; if loose, move it backward. If you still fail to get a correct tension, try changing the gears on the small end of the bottom cone, or gear that drives the sun wheel, as the case may be.

#### General Care of Frames.

Rolls should be picked once each day, oiled every other day, letting the flow be heavy at each stand so that the oil may reach the necks of the steel rolls. Bobbin gears should be oiled on the second doff of slubbers and intermediates after the frames have become warmed up. This will prevent them from sticking up, as they would do if oiled on the first doff, if on fine counts. Otherwise, they should be oiled as slubbers and intermediates. The front steel roll stands should be oiled morning and noon, just a drop in each stand. It is well to use non-fluid oil for this purpose.

Steps should be oiled once every two weeks with a good heavy oil. It is a good idea to have all oiling

(Continued on Page 16)



# SOUTHERN TEXTILE BULLETIN

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THURSDAY, NOVEMBER 6

### Notice of Strikes.

We give to our contemporaries the right which we claim for ourselves which is that of an editor to run his publication to suit himself but we do regret to see recently in other publications notices of several strikes among Southern cotton mill operatives.

For many years it has been the policy of the textile publications of the South not to publish notices of strikes and we believe that that policy has been to a large extent the cause of such a small number of strikes occurring among our mills.

Publishing an account of our strikes suggests to the minds of the operatives of all the mills a line of action which they may take upon slight provocation, or misunderstanding.

We believe in publishing the news but in the case of strikes publicity can do no good and will tend to develop a tendency that will disrupt the good feeling which now exists between the mills and the employees.

### The Value of the Contest.

On page 6 of this issue will be found the first of a series of articles, on "Care and Operation of Roving Frames," which have been written and submitted by practical mill men in competition for prizes which we have offered for the best article upon that subject.

Up to date twenty men have entered the contest but it is probable that many more will enter before the time limit which is Nov. 15th.

The writers of these papers are superintendents, overseers and second hands of Southern cotton mills and while some of the articles may be crude and rather elementary they are the ideas of men who have had long experience with roving machinery and are therefore intensely practical.

The average student of textiles has as his text books the writing of men whose knowledge is largely theoretical but a collection of the articles contributed to this contest are practical because they come from the men who are operating roving machinery for their living and know how to handle it successfully.

large children in something besides to the industry, of a contest such as we are now running but we doubt if there is any other means of giving as much valuable instruction to the young men who are growing up in our Southern mills.

Not only will they have an opportunity of reading closely the articles as they appear but we also will after the contest is closed print the entire series in book form, and widely distribute them as premiums to subscribers.

We have previously run contests upon the following:

"Opening, Mixing and Picking."

"Management of Help."

"Practical and Efficient Spinning."

Before launching the Southern Textile Bulletin, our editor, who originated the idea of these contests also ran contests for another journal upon the following subjects:

"Cause and Prevention of Uneven Yarn."

"Care of Cards."

"We estimate that 12,000 of these books were printed and that fully 8,000 of them have been distributed in the Southern cotton mills.

These books are passed from hand to hand and being read by many men have a great part in increasing the textile knowledge of the men in the mills.

They are of special value to the young men who are learning because they are practical and give the experience of men who have traveled the road which they are traveling.

Another and by no means a small effect of such a contest is its value to the men who take part in it.

In order to write intelligently upon a subject, a man must put his mind upon it and ideas come to him in such times that materially increase his knowledge, and we have noted the rapid advancement of men who have entered contests in

The articles as they appear are not always in the exact words of the writers, for some of the most practical and efficient men have little education and write and spell poorly. We tell them that what we want are practical ideas from practical men and we shape up the articles by correcting the spelling and punctuation.

The present contest for the best articles on "Care and Operation of Roving Frames" promises to be very interesting and will be well worth reading.

### Agriculture in the Mill Villages.

The United States Agricultural Department has put in operation a movement to interest the mill vil-

lage children in something besides their work in the mill. About one year ago Mr. James L. Carbery was employed as mill village demonstrator for South Carolina. He has been very industriously working to organize the girls into Tomato Clubs and has met with splendid success. This work is necessarily on a small scale, as the mill gardens are small.

Mr. Carbery, whose office is at Winthrop College, Rock Hill, goes from mill to mill and holds meetings with the people. He usually has a stereopticon with which he illustrates his lectures, thus making them more interesting. After the lectures he makes an effort to organize the girls into a Tomato Club and usually succeeds.

A better idea of his work can be given by relating his work at some one place, let us take the Arcade and Victoria Mills at Rock Hill.

Mr. Carbery organized a club of girls with 31 members. Each girl had a garden of 24 tomato plants. Mr. J. M. Ferguson was engaged to assist in the work at those two mills. These small plots, under the supervision of Mr. Ferguson were worked by the girls during the moments they were not engaged in the mill. Up to October 16 these 31 girls had gathered from their plots of 24 plants each 3,864 pounds of tomatoes, most of which amount has been canned.

One little girl, Miss Ruth Sides, 12 years old, made her own canner. She took an ordinary granite bucket, got a tin-bucket lid that was about the same size as the bottom of the bucket and punched this full of holes and placed in the bottom of the bucket.

She then secured a lid that fitted tightly over the top of the bucket and her canning outfit was complete. On this canner she successfully canned 24 quarts of tomatoes.

Mr. Carbery had a mill village fair at the Arcade and Victoria Mills October 11 and 12 which was counted one of the best of its kind ever held in the South. This exhibit was moved to the York county fair where it attracted as much attention as any other exhibit on the grounds. Mr. Carbery was assisted in this exhibit by four of the mill village girls, dressed in their club uniforms of white trimmed in red. There was on display needle work that would have done justice to an artist, also a display of implements made by one of the mill boys, very useful in getting at some of the hard places about the mill machinery. In the corner of the exhibit was the girl's canning exhibit. Their cans were banded in tiers and trimmed with green and ripe tomatoes, while red and blue baby ribbon floated untrammelled down the banks.

The purpose of this work is twofold: First, to give the girls a diversion that will lift their minds to higher ideals than mere work and loitering; second, to teach the mill people that they can grow much of what they eat right in their own gardens.—Charlotte Observer.



## PERSONAL NEWS

J. P. McCraw has resigned as overseer of weaving at the Highland Park Mill No. 1, Charlotte, N. C.

Jas. Holmes is now overseer of weaving at the Barker Mills, Mobile, Ala.

S. J. Webb has resigned as superintendent of the Danville Knitting Mills, Bon Air, Ala.

Chas. Davis has accepted a position with the Unity Cotton Mills, LaGrange, Ga.

Chas. Harlow, of Lindale, Ga., has accepted a position with the Summerville (Ga.) Mill.

Wm. Heggood is now master mechanic at the Columbus (Ga.) Mfg. Co.

Kershaw is now master mechanic at the Dwight Mfg. Co., Alabama City, Ala.

B. F. Grant has resigned as second hand in spinning at the Lydia Mill, Clinton, S. C.

William Dellinger, of Caroleen, N. C., has accepted a position at Statesville, N. C.

V. M. Johnson has accepted the position of overseer of weaving at the Dixie Mills, LaGrange, Ga.

J. C. Waters has resigned as superintendent of the Park Cotton Mills, LaGrange, Ga.

Marshall Dilling, superintendent of the Avon Mill, Gastonia, N. C., has been quite sick.

W. C. Haney, of the Poe Mill, Greenville, S. C., has been visiting at Westminster, S. C.

A. R. Simpson, of Bladenboro, N. C., has become second hand at the Lumberton (N. C.) Mills.

J. M. Waddleton, formerly of Fayetteville, N. C., has become overseer of weaving at the Highland Park Mills, No. 1, Charlotte, N. C.

Joe Cocker has been promoted from card grinder to section hand in carding at the Clifton (S. C.) Mills.

J. F. Kersey has returned to his former position as superintendent of the Danville Knitting Mills, Bon Air, Ala.

G. C. Churchill has been promoted from second hand to overseer of carding at the Bibb Mills, Macon, Ga.

Chas. Knight has been promoted from section hand to second hand in spinning at the Gainesville (Ga.) Mills.

Homer Riddle, of Clinton, S. C., has accepted the position of second hand in spinning at the Lydia Mill, Clinton, S. C.

Shearin, of Rocky Mount, N. C., has accepted the position of secretary of the Y. M. C. A. at Kannapolis, N. C.

P. Sparks, formerly of Shawmut, Ala., has accepted the position of superintendent of the Park Cotton Mills, LaGrange, Ga.

David Clark, editor of the Southern Textile Bulletin, is on a two-weeks' business trip to the New England States.

T. E. Jett, of Trough, S. C., has accepted a position in the machine shop of the Anderson, (S. C.) Cotton Mill.

J. D. Tice, general manager of the Anderson (S. C.) Cotton Mills has returned home after spending some time in a sanatorium at Atlanta, Ga.

H. W. Owens has resigned as secretary of the Y. M. C. A. at Kannapolis, N. C., to accept a similar position at Ware Shoals, S. C.

Geo. G. Boone has returned to his former position of overseer of weaving at the Osage Mills, Bessemer City, N. C.

W. C. Carter has been promoted from section hand to second hand in carding at the Bibb Mills, Macon, Ga.

T. A. Marshall, of Charlotte, N. C., has accepted the position of second hand in weaving at the Patterson Mill, Rosemary, N. C.

CARDS,  
DRAWING,

COTTON  
MILL MACHINERY

SPINNING  
FRAMES,

MASON MACHINE WORKS

TAUNTON, MASS.

EDWIN HOWARD, Southern Agent

Greenville, S. C.

COMBERS,  
LAP MACHINES.

MULES,  
LOOMS.

### Superintendents and Overseers

#### Thomaston Cotton Mills.

##### Thomaston, Ga.

A. T. Matthews.....Superintendent  
A. E. Massey.....Carder and Spinner  
Pat Hollis.....Weaver  
Robert Adams.....Cloth Room  
John Hewitt.....Master Mechanic

#### Lang Cotton Mills.

##### Lannett, Ala.

W. R. Reid.....Superintendent  
P. J. Sprayberry.....Carder  
J. T. Howe.....Spinner  
Sol. Knight.....Weaver  
G. E. Reeves.....Master Mechanic

#### Gaffney Mfg. Co.

##### Gaffney, S. C.

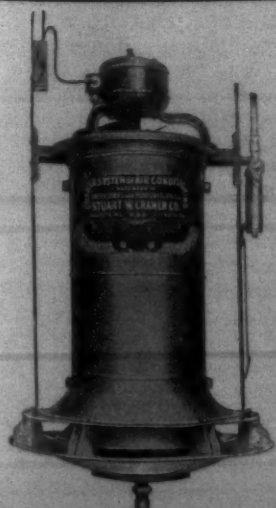
W. R. Tattersall.....Supt.  
M. B. Tennyson.....Carder  
J. W. Kennett.....Spinner  
L. A. Trippe.....Weaver  
G. C. Meredith.....Cloth Room  
T. W. Little.....Outside Overseer  
G. S. Melton.....Master Mechanic

#### Irene Mills.

##### Gaffney, S. C.

J. R. Mallory.....Supt.  
M. O. Fowler.....Carder  
J. W. Godfrey.....Spinner  
J. A. Graham.....Weaver  
H. A. Holland.....Cloth Room  
A. D. Thackston.....Night carder  
E. N. McGuinn.....Night Weaver  
C. F. Humphries.....Master Mechanic

OVERFLOW PERSONALS PAGE 16



## Cramer System of Air Conditioning

WITH OR WITHOUT

### Automatic Regulation of Humidity and Temperature

Moderate in Cost

Cheap to Operate

Yields Big Returns

## STUART W. CRAMER

CHARLOTTE,

NORTH CAROLINA



## MILL NEWS ITEMS OF INTEREST

**Winder, Ga.**—It is reported that the Winder Cotton Mill will be financially reorganized.

**Gastonia, N. C.**—The new brick addition to the Ozark Mill is nearing completion and will soon be ready for occupancy.

**Taylorsville, N. C.**—The Watts Manufacturing Co., recently reported as planning an addition, have installed 200 spindles and will add 4,000 more in the near future.

**Lanett, Ala.**—Cylinder head blew out of No. 1 engine head in Mill No. 1 of Lanett Cotton Mills causing a shut down of part of machinery for several weeks.

**Henderson, N. C.**—The Carolina Bagging Co. will build an addition to their bagging plant to cost about \$3,000. It will be 60x30 feet, of brick construction.

**LaFayette, Ga.**—A part of the new machinery for the Walker County Hosiery Mills has been received and put into operation and the rest of the new equipment is being installed as fast as it arrives.

**Manchester, Ga.**—The Manchester Cotton Mills will build a two story brick addition, to cost about \$12,000. They have awarded the contract for the construction to Frank Granby, of Greenville, S. C. Walker and Chae, of Atlanta, are the architects.

**Hagerstown, Md.**—Cromer Brothers will build a 40x39 foot addition to their silk plant. The basement of the addition will be used as a dyeing department and the remainder will be used in connection with the raw silk department.

**Charlottesville, Va.**—The Charlottesville Silk Mills, recently noted as incorporated and organized, will expend \$20,000 for their machinery. The plant will be two stories high, 200x64 feet. The equipment will include 42 looms with individual electric drive.

**Plana, Texas.**—It is reported here that D. C. Timmins will organize a company to build a cotton mill. He has not yet determined the details of the new enterprise, but active work is expected to start at an early date.

**Fort Mill, S. C.**—At an unknown hour Wednesday night some party or parties entered the cellar of the weave room of the Fort Mill Mfg. Company's mill No. 1, and with a knife proceeded to slash the main 24-inch drive belt and another and smaller belt was slashed in such a manner as to be rendered practically worthless, it was said. This is the third time within a year the company has suffered such damage.

**LaFayette, Ga.**—The Fortune Hosiery Mills, lately mentioned as organized and planning to start a hosiery mill, expect to rent a building and install 60 knitting machines and electric power equipment. They will manufacture 300 dozen pairs of hose a day.

**Demopolis, Ala.**—The Demopolis Cotton Mills have been incorporated with a capital stock of \$30,000. The incorporators are W. W. Brame, of Montgomery, who will be president of the company; F. H. Elmore, vice-president, and Geo. D. Mentz, secretary and treasurer. It is understood that the new company is preparing plans for the erection of a cotton mill.

**Knoxville, Tenn.**—By declaration of a semi-annual dividend of 5 per cent, the stock of the Brookside Mills, is placed on a yearly rate of 10 per cent. The disbursement is payable Nov. 15. Previously the stock was on an annual basis of 8 per cent. The company also announces an increase in the outstanding capital stock from \$900,000 to \$1,200,000.

**Ridgedale, Tenn.**—The Davis Hosiery Mills, lately reported as organized here, will install 100 knitting machines and electric power drive for their plant, which is a branch of the Chattanooga company. They have already ordered their machinery and will erect a 200x64 foot mill, brick construction building.

**Quitman, Ga.**—The decision of Referee J. F. McCracklin, in the case of the sale of the Atlantic and Gulf Mills, has been upheld by Judge Shepperd, except in the case of a small part of the real estate. The case was reviewed in Pensacola, Fla., Bennet and Harrell representing the Bank of Quitman and Branch and Snow representing Trustee Young.

**Fayetteville, N. C.**—It is reported that the Holt-Morgan Mill is making arrangements to secure new selling agents. The mill has 100 broad looms, 354 narrow looms and 10,000 ring spindles and makes fine ginghams, madra sand cheviots. J. E. Williamson has recently become manager.

**Greenville, N. C.**—The Greenville Cotton Mills, mentioned last week as being organized here, have been incorporated with a capital stock of \$250,000, of which \$90,000 has been subscribed by R. R. Cotten, W. H. Norris, J. G. Moye and others. They will manufacture cotton hosiery yarns and there is a provision in their charter giving them the right to do a general wholesale and retail export trade.

**Greenville, S. C.**—A cooling system for its reservoir has recently been installed by the F. W. Poe Manufacturing Company. The essential principle of the system is in the method of cooling the water by continuously throwing the water into the air.

The cooling system was installed by Wm. G. Gregory, chief engineer and master mechanic of the manufacturing company.

The apparatus consists of an arrangement of 75 spray nozzles with the capacity of throwing 4,000 gallons of water to a height of 12 feet every minute. In seven and one half hours the entire contents of the reservoir are thoroughly cooled, every drop having been thrown into the air for 12 feet. The machinery is operated by a 35 horsepower motor.

**Charleston, S. C.**—The organization of the Royal Mills, purchasers of the properties of the Royal Bag and Yarn Manufacturing Co., in this city, it is expected, will be started again in the next few weeks, according to an announcement from the new management.

While in operation the Royal Bag and Yarn Manufacturing Co. employed some 537 people. Cotton bagging was manufactured on a large scale from raw material imported direct from India. Later on a cotton manufacturing plant was installed and the company manufactured its own cotton cloth for the bags, which previously were made from cloth purchased from various mills.

Erected in 1901, the plant represented an investment of \$562,000. Upon the failure of the concern two years ago the property was bid in for approximately \$100,000 by Capt. F. W. Wagener and others of Charleston.

**Anderson, S. C.**—The Cox Mills, which were recently bought in by Wellington Sears & Co., of Boston, as noted, are to be reorganized and new machinery installed for the manufacture of duck. The plant formerly manufactured sateens.

For the past two weeks the work of taking out the present machinery has been under way, and while no announcement has been made to the effect, it is understood from a reliable source that the new owners will put the plant back into operation just as soon as the machinery can be changed. Just how much of the present equipment will be taken out is not known. A large part of it is new, having been installed only a short time before the mill closed down. It is now being placed in the hands of machinery dealers in Charlotte and the machinery for the new product is expected to arrive within a short time.

**Oklahoma City, Okla.**—Preliminary plans for organization of the before noted \$10,000,000 cotton mill company, the acquiring of lands and the funding of the project have been in the making for two years. The original company, The Cotton Mills Security Co., was chartered in November, 1911, with a capitalization of \$5,000,000, and has secured title to 5,700 acres of land northwest of the city.

W. B. Whaley, promoter of a number of Eastern cotton mills, who was sent east to float the bonds, after detailing the methods of cotton mill promotion and financing, described the present status of the project and asked that action be taken on three things necessary to the financing of the company; first, the appointment of a directorate of responsible men to dictate its affairs; second, to indorse an appraisal of the land held by the company, which places its value at \$125 an acre; and third, to provide funds to send himself to Eastern money markets to secure the necessary credit.

After details of the plan were fully discussed all three of Mr. Whaley's requests were granted.

This board will not be ample, personally, for the financing of the project, but will oversee the conduct of its affairs and assure its integrity.

In outlining the program for the development of the project Mr. Colcord first read of numerous indorsements of Mr. Whaley as a builder of cotton mills and organizer of cotton mill companies from men with whom he has been associated in that line for the past 25 years. Testimonials from bankers and cotton mill men of the Atlantic coast where Mr. Whaley has established a long line of mills recommended his ability and integrity.

Mr. Whaley explained in detail the methods he would use in financing the concern. The company has created a first mortgage real estate bond issue of \$300,000 or \$52.63 per acre against the 5,700 acres of land owned. He proposes by means of a contract with a dry goods commission house in the East, calling for the handling of ten years' output from the mill, to arrange for \$1,000,000 credit.

From this credit \$300,000 secured by the bond issue will cancel all obligations against the land and the funds will be provided for the procedure of operations.

The company has created with the Commerce Trust Co., of Kansas City, a betterment bond issue of \$5,000,000. This will pay off the first mortgage bond issue, pay for the original cost of the land and will leave \$4,300,000 for the betterment of the property.

As soon as the \$300,000 first mortgage bond issue is placed the Cotton Mills Company will be charter-



Thursday, November 6, 1913.

ed to equip a mill with 600,000 spindles and 15,000 looms.

According to Mr. Whaley's plans, 25 per cent of the mill capacity will be built, installed and put in operation in the first year, employing 2,500 operatives. The whole plant is to be in operation in three years, employing 8,000 operatives and with a local expenditure of \$8,000,000 annually (and a weekly pay roll of \$62,400).

After the explanation of the plans and a discussion, \$1,025 was subscribed within a few minutes to provide for the expenses of a trip to be made East by Mr. Whaley to make a contract for the output of the mill to be handled by a dry goods commission house.

#### Will Not Use Colored Labor.

A report has been printed in several papers to the effect that the new Highland Cotton Mill at High Point, N. C., would be operated by colored labor, but we are advised by the management of that mill that the report is false and that it will be operated entirely by white labor. They expect to have the mill in operation early in December.

#### Prof. Nelson's Son Injured.

Thomas Nelson, seven-year-old son of Prof. Thomas Nelson of the textile department of A. & M. College, Raleigh, N. C., had his skull fractured last Thursday by being run over by an automobile occupied by negroes coming from the negro fair. The driver was a negro. The child's condition is serious, but he is expected to recover.

#### Sea Island Cotton in Georgia.

The growth of Sea Island cotton in Georgia is the subject of a new and interesting measure which has just been introduced by Senator Hoke Smith in the United States senate. The measure proposes to appropriate \$100,000 to cover the expenses for the national department of agriculture to conduct investigations and make experiments in the cultivation of the sea island variety, in Georgia, Florida and South Carolina, with a view to the improvement of the seed.

#### German Textile Mill Activity.

During the current year the amount of new capital invested in German textile undertakings in considerably in excess of that for any such previous record.

The average rate of dividends paid by most branches of the industry shows a marked advance compared with last year. During

the period January-August, 1913, the average rate of dividend paid by 216 textile companies, representing an aggregate capital of \$98,341,000, works out at 8.6 per cent, against 7.1 per cent last year.—Consular Reports.

#### Scotch Tweed Industry.

The South Scotland tweed industry, the silk, lace, hosiery and other industry, which for two or three years has been very active, is now somewhat depressed. During the last three months orders have fallen off. At the annual meeting of the Manufacturers' Corporation in Galashiels, on October 9, it was stated by the chairman that the depression was due in some measure to the waste of capital caused by the Balkan war and the mobilization of great masses of men by Austria and Russia, but that the principal cause of the loss of trade was the decree of fashion in favor of fine Saxony makes of cloth and against chevots thus giving worsted manufacturers an opportunity which they were strenuously improving, while tweed manufacturers were facing a winter of poor primes.

In regard to the probable effect upon the Scotch tweed trade of the reduction of the American tariff on woolen goods (which will take effect on Jan. 1 next), there are differences of opinion. The new American tariff is at present considered by most mill owners an uncertain element in the situation, mainly on account of (1) the free-listing of wool, which, while lowering prices to American mills, may increase prices in this market; (2) the American preference, for the time being at least, for worsted goods; and (3) the competition of cheaper English and other European cloths.—Consular Reports.

#### Textile Wages.

Wages in the cotton, woolen and silk manufacturing industries of the United States during the past 23 years, according to Government statistics, have increased to a considerable extent, while the nominal full time hours per week for the principal occupations combined have decreased, according to the bureau of labor statistics. These industries employ approximately 333,000 persons.

As regards recent years, wages in the cotton industry were 4.5 per cent lower in 1909 than in 1907; after 1909 they advanced continuously. The nominal full time hours per week in the principal occupations combined, not including finishing in the cotton industry, for 1912 showed small decreases.



### Speaking of Humidifier Repairs

We believe in making a thing to sell so that it doesn't need much attention; but when that attention is needed it will not be dreaded by complicated mechanism.

#### THE TURBO HUMIDIFIER

is made to wear—and easy to repair. I saw a green man who had never seen the Turbo system before get up on a step ladder, remove and replace a head in less than four minutes.

Further, we do not make our money in repair parts. We can't. There are too few needed.

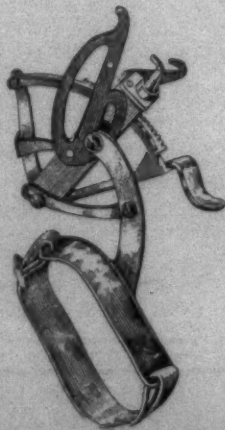
Get Turbofied—and satisfied.

THE G. M. PARKS CO.  
FITCHBURG, MASS.

Southern Office, No. 32 West Trade St., Charlotte, N. C.  
B. S. COTTRELL, Manager

## The Byrd Knotter

Price \$20.00



Simple of Operation  
Durability Guaranteed  
Small Repair Cost

Byrd Manufacturing Co.  
DURHAM, N. C.

## AMERICAN MOISTENING COMPANY

BOSTON, MASSACHUSETTS

FRANK B. COMINS, Vice-Pres. & Treas.

WILLIAM FIRTH, President

THE ONLY PERFECT SYSTEM OF AIR MOISTENING  
COMINS SECTIONAL HUMIDIFIER

JOHN HILL, Southern Representative, Third Nat. Bank Building, ATLANTA, GEORGIA



## Cotton Goods Report

New York.—The demand for gray goods during last week was only moderate. On goods sold on contract, prices have been somewhat easier. On spot goods, however, the market continues generally firm as the mills are sold up through the first of the year. Converters were watching the cotton market and did not seem inclined to go ahead and take goods on contract at the prices now being asked. Mills are watching the cotton market and seem more willing to take concessions on future orders. The unsettled condition of the cotton market is still the dominant factor in the situation.

In the cotton goods ends, the market is rather quiet just at present. Buyers are studying the future and are slow at making any move to cover their forward needs. Demands for fine and fancy goods have been fair. There is a steady call for novelty goods, but orders are small. Printed crepes have sold extremely well. Silk striped poplins are showing up well and buyers are asking for this class of goods. It is stated in some quarters that the demand for plaids is falling off, and that they will not be good sellers for the spring. Up to the present time, imported goods have not played an important part in the orders for spring. The leading converters of domestic fabrics do not feel foreign competition as yet, and the opinion is growing that the new tariff will not have as great an effect upon converters as was first expected.

Trading continued only moderate during the week in the Fall River print cloth market, with concessions offered on some styles, but prices generally have held firm. The total sales are estimated at about 100,000 pieces, 40,000 of which were spots.

The condition of the cotton market has again had its effect in print cloth trading, and manufacturers for the first time in weeks, have been shading prices. Concessions have not been general though, and were made only on certain styles where good sized orders were placed. It required orders of 5,000 pieces or more to bring any shading in quotations, and then the reduction never amounted to more than a sixteenth of a cent. Medium odds and narrow printers' styles were those showing the concessions.

The demand for spots has been considered fair, but by no means plentiful at this season of the year. Contracts generally are covering a period of ten weeks and some goods have been placed for delivery into February.

The mills under present quotations are ready to go ahead with contracts upon the present basis, but the buyers are holding off for better terms. They have been a little more ready to take contracts this week than a week ago because the

market is a little easier and concessions are offered. As the mills are now fairly well sold up for the remainder of the year it is expected that prices will continue to hold firm, except as the case was this week, where good sized orders are placed ahead. The fairly good trading of the last few months has cleaned the mills up on much of the accumulation of stocks and none is overburdened.

Prices were as follows in New York:

Prt clth, 28-in, std 4	—
28-in., 64x60s..	3 3-4
4-yard, 80x80s ..	7 1-2
Gray goods, 39-in., 68	—
x72s ..	6 1-4
38 1/2-in. std ..	5 5-8
Brown drills, std ..	8 1-4
Sheetings, southern	—
std ..	8 1-4
3-yard ..	7 3-4
4-yard, 56x60s ..	6 3-8 to 6 1-2
4-yard, 48x48s ..	6 1-4
4 1/2-yard, 44x44s ..	5 3-8 to 5 1-2
5-yard, 48x52s ..	5 to 5 1-2
Denims, 9-oz. ..	14 1-2 to 17
Stark, 8-oz. duck ..	14
Hartford, 11-oz., 40-	—
in. duck ..	16 1-2
Ticking, 8-oz. ..	14
Stand. fancy print ..	5 1-4
Std gingham ..	6 1-2
Fine dress gingham 8	to 9 3-4
Kid fin. cambrics ..	5 3-4 to 4 7-8

### Weekly Visible Supply of American Cotton.

October 31, 1913 ..	3,155,895
Last week ..	2,807,791
Same date last year ..	3,580,234

### Weekly Cotton Statistics.

New York, Oct. 31.—The following statistics on the movement of cotton for the week ending Friday, October 31, were compiled by the New York Cotton Exchange:

WEEKLY MOVEMENT.	
Port receipts ..	572,683
Overland to mills and Canada ..	38,639
Southern mill takings (estimated) ..	85,000
Gain of stock at interior towns ..	30,876
Brought into sight for the week ..	727,198
TOTAL CROP MOVEMENT.	
Port receipts ..	3,416,083
Overland to mills and Canada ..	122,539
Southern mill takings (estimated) ..	590,000
Stock at interior towns in excess of Sept. 1 ..	380,440
Brought into sight thus far for season ..	4,509,062

"Mrs. Brown has the kleptomania."

"Indeed; what is she taking for it?"

"Anything that looks good to her."—Ex.

## GRINNELL WILLIS & COMPANY

44-46 Leonard Street, New York

### SELLING AGENTS

BROWN AND BLEACHED COTTON GOODS FOR HOME EXPORT MARKETS

## RICHARD A. BLYTHE

(INCORPORATED)

Cotton Yarns Mercerized and Natural

ALL NUMBERS

505-506 Mariner and Merchant Building

PHILADELPHIA, PA.

## The Desirability of the South

as the place to manufacture cotton goods is illustrated in the increase of 67% quoted by census department. We can offer attractive situations for those desiring to enter this field.

## J. A. PRIDE

General Industrial Agent, Seaboard Air Line Railway

NORFOLK, VIRGINIA.

When you enjoy the economy of lubrication provided by



you discover that increased production means a great deal more than a slightly lower lubricant expense.

Figure out the saving involved in a 5% reduction of oil stains in your Carding, Twisting and Spinning. Then write us for test samples of NON-FLUID OIL for Comb-boxes, Roll Necks and Twister Rings.

SOLE MANUFACTURERS

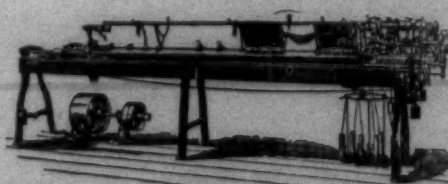
New York & New Jersey Lubricant Co.  
165 Broadway, NEW YORK

## IMPROVED INMAN AUTOMATIC BANDING MACHINES

MANUFACTURED BY

COLE BROTHERS

PAWTUCKET, R. I.



The only automatic machine in the world for making loop bands for spinning frames. Superior quality of bands without any cost of making. All bands exactly alike and no stretch of bands after they are put on. Saves child labor.

Also Beaming Machine to beam on to slasher beams.



# The Yarn Market

Philadelphia, Pa.—Business in the yarn market last week was spotty. Some dealers had a fairly good week, while others said they did very little. There were a few sales of 25,000 to 50,000 pounds. Speaking of business for the month just closed, a good many dealers said that business for October was satisfactory, and that the quantities charged up for delivery were large. The receipts of yarn from the South continue to be larger but there is no accumulation of stocks in this market. The yarn goes into the hands of manufacturers about as fast as it arrives, and there is a scarcity on one or two numbers.

Southern spinners of knitting yarns are rather well sold up for the next two to four months and they are very firm on holding for full quoted prices. Some are asking on the basis of 23 1-2 and 24 cents for 10s, and say that prices will go still higher. Some spinners are quoting 24s Southern frame spun cones at 27 and 27 1-2 cents, 26s at 27 1-2 and 28 cents and 30s at 30 cents.

On single and two-ply combed peeler yarns the demand is light. Prices are so high that manufacturers buy only when in real need of the yarns. Dealers who make a specialty of handling combed yarns say that knitters are fairly well covered on them for the business they have on their books and consequently spinners are sold up to the same extent. The demand for both single and ply combed yarns is much less than the production, and it will only be a question of time until spinners have to reduce prices sufficiently to attract buyers. This is the way the situation has been summed up by one dealer.

Mercerized yarns are very quiet and the competition for what little business there is is very sharp. A sale of 50-2 mercerized on cones was made for 57 cents, and 10 cases were sold from stock for 55 cents; 60-2 cones sold for 47 and 48 cents; 60-2 cones sold for 67 cents and 70-2 sold for 73 cents.

## Southern Single Skeins.

10s to 8s	21 1-2
10s	22
12s	22 1-2
14s	22 1-2-23
16s	23 1-2-24
20s	25
24s	26
26s	26 1-2
30s	27 1-2-28

## Southern Two-Ply Skeins:

8s	21	21 1-2
10s	22	22 1-2
12s	22	22 1-2
14s	22	22 1-2-23
16s	23	23
20s	25	25
24s	26	26
26s	26	26 1-2
30s	28	28
40s	34	34
50s	39	39
60s	48	48

## Carpets and Upholstery Yarn in Skeins:

9-4 slack	22
8-4 slack	21 1-2-22
8-3-4 hard twist	19 1-2

## Southern Single Warps:

8s	21 1-2
10s	22
12s	22 1-2
14s	23
16s	23 1-2-24
20s	24 1-2-25
24s	26
26s	26 1-2
30s	27 1-2-28
40s	33 1-2

## Southern Two-Ply Warps:

8s	21
10s	22 1-2
12s	22 1-2-23
14s	23
16s	23 1-2-24
20s	24 1-2
24s	25 1-2-26
26s	26
30s	27 1-2-28
40s	34

## Southern Frame Spun Yarn on Cones

8s	22	22 1-2
10s	22	22 1-2-23
12s	23	23 1-2
14s	23	23 1-2-24
16s	24	24 1-2
18s	24	24 1-2
20s	25	25
22s	25	25 1-2
24s	26	26 1-2
26s	28	28
30s	28	28

## Two-Ply Carded Peeler in Skeins:

20s	26	26 1-2
22s	27	27
24s	27 1-2	27 1-2
26s	27 1-2-28	27 1-2-28
30s	29	29 1-2
36s	32	32
40s	34 1-2	34 1-2
50s	40	40
60s	50	50

## Single Combed Peeler Skeins:

20s	30 1-2-31
24s	33 1-2-34
30s	35 1-2-36
40s	41
50s	46 1-2-47
60s	53

## Two-Ply Combed Peeler Skeins:

20s	31 1-2-32
24s	32 1-2-33
30s	36
40s	42
50s	45
60s	53
70s	61
80s	68

## A. M. Law & Co. F. C. Abbott & Co

Spartanburg, S. C.

Charlotte, N. C.

BROKERS

BROKERS

Dealers in Mill Stocks and other Southern Securities

Southern Mill Stocks, Bank Stocks  
N. C. State Bonds, N. C. Railroad Stock and Other High Grade Securities

## South Carolina and Georgia Mill Stocks.

	Bid	Asked
Abbeville Cot. M., S. C.	100	100
Aiken Mfg. Co., S. C.	35	35
Amer. Spinning Co., S. C.	154	154
Anderson C. M., S. C., pf	90	90
Arcadia Mills, S. C.	91	91
Aragon Mills, S. C.	65	65
Arkwright Mills, S. C.	100	103
Augusta Factory, Ga.	35	35
Avondale Mills, Ala.	115	120
Belton Cot. Mills, S. C.	100	100
Brandon Mill, S. C.	75	75
Brigdon Mills, S. C.	61	61
Calhoun Mills, S. C.	85	85
Capital Cot. Mills, S. C.	85	85
Chiquola, S. C., com.	105	115
Clifton Mfg. Co., S. C.	101	101
Clifton Mfg. Co., S. C., pf	100	100
Clifton Cot. Mills, S. C.	125	125
Courtenay Mfg. Co., S. C.	90	90
Columbus Mfg. Co., Ga.	92 1/2	92 1/2
Cox Mfg. Co., S. C.	100	100
D. E. Converse Co., S. C.	85	85
Dallas Mfg. Co., Ala.	100	100
Darlington Mfg. Co., S. C.	65	65
Drayton Mills, S. C.	30	40
Eagle & Phenix Mill, Ga.	80	90
Easley Mill, S. C.	180	180
Enoree Mfg. Co., S. C.	25	50
Enoree Mfg. Co., S. C., pf	100	100
Enterprise Mfg. Co., Ga.	65	70
Exposition Mill, Ga.	150	150
Fairfield C. Mills, S. C.	70	70
Gaffney Mfg. Co., S. C.	62 1/2	62 1/2
Gainesville C. M. Co., c'm	75	75
Glennwood Mills, S. C.	141	141
Glenn-Lowry Mfg. Co., S. C.	101	101
Glenn-Lowry Mfg. Co., S. C., preferred	86	86
Gluck Mills, S. C.	80	80
Granby Cot. Mills, S. C.	...	...
Granby C. M., S. C., pf	...	...
Graniteville Mfg. Co., S. C.	140	145
Grendel Mill, S. C.	100	100
Hamrick Mills, S. C.	102	102
Hartsville C. M., S. C.	170	170
Inman Mills, S. C.	105	105
Inman Mills, S. C., pf	100	100
Jackson Mills, S. C.	90	90
King, John P. Mfg. Co., Ga.	80	86
Lancaster C. Mills, S. C.	130	130
Lancaster C. M., S. C., pf	97	97
Langley Mfg. Co., S. C.	70	75
Laurens Mill, S. C.	15	15
Limestone Mill, S. C.	125	133
Lockhart	40	40
Marlboro Mills, S. C.	65	75
Mills Mfg. Co., S. C.	110	110
Mollobon Mfg. Co., S. C.	90	90
Monaghan Mills, S. C.	...	...
Newberry C. Mills, S. C.	135	140
Ninety-Six Mills, S. C.	135	135
Norris C. Mills, S. C.	102	102
Orangeburg Mfg. Co., S.	...	...

## North Carolina Mill Stocks.

	Bid	Asked
Arista	...	...
Arlington	141	141
Avon	...	...
Brown, pfd	100	100
Cannon	151	151
Cabarrus	150	150
Chadwick-Hoskins, pfd	100	100
Chadwick-Hoskins, com	85	85
Chronicle	166	166
Cliffside	190	195
Effrd. N. C.	115	121
Erwin, com	150	150
Erwin, pfd	103	103
Gibson	106	106
Gray Mf. Co.	117	120
Highland Park	191 1/2	200
Highland Park, pfd	102	102
Imperial	133	131-2
Kesler	145	165
Loray Mills, pfd	95	95
Loray, com	10	10
Lowell	181	181
Majestic	150	150
Patterson	125	125
Washington Mills	10	10
Washington Mills, pfd	100	100
Wiscassett	135	150
Olympia Mfg. Co., S. C., jfc	...	...
Parker Cotton Mills, guaranteed	100	100 & 101
Parker, pfd	40	45
Common	16	20
Orr Cotton Mills	92 1/2	92 1/2
Ottaray Mills, S. C.	100	100
Oconee Mills, common	100	100
Oconee Mills, pfd	100 & m.	100 & m.
Pacole Mfg. Co., S. C.	101	101
Pacole Mfg. Co., pfd	100 & m.	100 & m.
Parker Mills, pfd	40	40
Pelzer Mfg. Co., S. C.	135	135
Pickens C. Mills, S. C.	100	100
Piedmont Mfg. Co., S. C.	144	160
Poe F. W., Mfg. Co., S. C.	105	115
Richland C. M., S. C., pf	...	...
Riverside Mills, S. C.	25	25
Roanoke Mills, S. C.	140	160
Saxon Mill, S. C.	126	126
Sibley Mfg. Co., Ga.	64	64
Spartan Mill, S. C.	125	125
Tucapau Mill, S. C.	280	280
Toxaway Mills, S. C.	72	72
Union-Buffer, 1st pfd	35	40
Union-Buffer Mills, S. C., 2nd pfd	10	10
Victor Mfg. Co., S. C.	...	...
Ware Shoals Mfg. Co., S. C.	75	75
Warren Mfg. Co., S. C.	80	85
Warren Mfg. Co., pfd	100	100
Watts Mill, S. C.	35	35
Williamston Mill, S. C.	9	9
Woodruff C. Mills, S. C.	96	96
Woodside C. Mills, S. C.	...	...



## Personal Items

A. P. Richardson, of Gastonia, N. C., has accepted a position with the Ozork Mills, of that place.

T. Brown has resigned as overseer of carding at the Bibb Mill No. 1, Macon, Ga., and accepted a similar position at the Payne Mills, of the same place.

Geo. S. Caine has resigned his position at the Dan River Mills, Danville, Va., to accept one with the Roanoke Mills, Roanoke Rapids, N. C. Before leaving the help presented him with a leather suit case, a silk umbrella and fountain pen.

### Charged With Criminal Assault.

John Ball, a young white man and an operative in the cotton mill at Pelham, Ga., was arrested last week, charged with criminal assault.

It is alleged that Ball, in company with another man, went to the house of the victim, and after firing a pistol into the house, forced admittance, at which time the crime was committed. John Agler, the man in company with Ball, was also arrested, and it is understood is charged with doing the shooting.

### Fight Over a Calf.

Steve Benson, an employee of the Wylie Cotton Mills, Chester, S. C., was arrested last week on the charge of shooting at Albert Ratterree with intent to kill.

The trouble had its inception, it is said, in the mill village over Benson's calf getting into Ratterree's crop of cotton. The calf was taken up by Ratterree, it is said, and Benson was forced to pay \$1 to again secure it.

Benson, it is said, claims that Ratterree beat his calf, from which some angry words ensued, and he also claims he pulled his pistol on him and snapped it. After seeing that the pistol would not fire, it is alleged that Ratterree threw several rocks at him. To protect his own life, Benson, it is said, whipped out his pistol and fired at Ratterree.

### About Sizol.

The Seydel Mfg. Co., of Jersey City, N. J., have recently sent the following letter to the trade: Gentlemen Weavers:

Last month we gave you the comparative results obtained by a Southern mill showing that a long boil of Sizol and starch is absolutely necessary to secure good results.

This month another mill which boils its sizing two hours reports an average production of 96 per cent running no overtime, of which only 1½ per cent are seconds.

This 1½ per cent tells the tale and is a direct result of Sizol on 30's warps.

Are your results as good?

At your service.

The Seydel Mfg. Company.

### Methods of Cleaning Fires.

(Continued from Page 4)

grate, before he pulls any of it out of the furnace. This he should do to save himself from the heat which the hot clinker and ash would radiate into his face if he pulled out the clinker from the front part of the grate first and then tried to remove the clinker from the rear part of the grate. If all the clinker and ash are first collected on the front part of the grate the fireman can then step farther away from the furnace and with the long-handled hoe pull the clinker down onto the boiler room

floor without being subjected to the heat from the clinker at short distance.

While pulling the clinker and ash onto the front part of the grate the fireman can rest the hoe during the backward stroke on the lower edge of the furnace-door frame or on the pile of clinker and ash already pulled to the front. This method of handling the hoe is similar to that shown in Fig. B; by its use the fireman will save himself the hard labor of lifting the hoe when he pushes it to the rear of the grate. In the majority of cases a steel-top wheelbarrow can be placed close to

the furnace door and the clinker and ash can be pulled out of the furnace door directly into the wheelbarrow.

### Care and Operation of Roving Frames.

(Continued from Page 9)

points not already mentioned oiled twice a day, even if some of them, as the carriage lifting shaft and train gearing are very slow in motion. It is the slow moving bearings that play the mischief when they get "stuck up" for the lack of oil. Front steel roll stands should be picked twice each week and the frames kept reasonably clean at all times. A clean frame is conducive to good running work. Roving frames should have a good cleaning and overhauling at least once a year. Take out of the steel rolls and give them a good cleaning and scouring. Examine them for loose and crooked joints and have same fixed. Place a small quantity of good soluble grease in the stands and replace the rolls, being careful not to bend them while doing so. Remove the gears from the spindles, take out the spindles and clean the bolsters, being sure to get all of the gummed cotton and oil out of them. Next take the casing off of the carriage and clean thoroughly, removing all the gummed up grease and lint from the hanger bolsters. Place a fresh supply of grease in the hangers. Clean the spindle shafts, examine the steps to see if any are loose, oil the steps, grease the shaft hanger steps. Replace the bottom casing and then put in the spindles, trying each one to see if it turns freely. If not, reset the bolster. Put on the spindle gears, replace the carriage casing, oil bobbing ears and bolsters and examine the leather rolls, discarding all bad ones. Then pull the roving through the trumets until it reaches the front roll, then put back leather roll, oil and hang the weights. The frame is then in good shape, but do not stop there. Examine the whole frame thoroughly, replacing all the worn gears and replace or have bushed all the worn bearings. If the cone or jack shaft is badly worn, have new one made at once. See that all oil holes are open. Take off the large gear in the head end that drives the front roll, start up the frame, oil all slow moving parts with gasoline or kerosene to remove oil and dirt. Replace the gears in the head end, set draft gears, start up the frame and put up the ends. You then have a frame that is almost as good as new.

If the rules already given are carried out, there will not be much fixing to do, except set hobbin gears best fixing is done by using the oil cup twice a day. The only part and change draft gears, etc. The that give serious trouble to the fixer is the carriage traverse change motion and the gap gear or plunger that makes the change. This part of the frame should be examined often, all bolts kept tightened and gap and bevel gear on end changed before they become so badly worn that they fail to do their work. Then the frame runs over, making a lot of waste and sometimes getting the whole traverse motion out of adjustment. Of course, there are other troubles which may present themselves, but the things I have mentioned, if not carefully looked after, will give the most trouble.

Uno.

(Continued Next Week.)

## HIGH GRADE MILL BRUSHES



Special Brushes Made to Order

All Kinds of Brushes Repaired

**D. D. FELTON BRUSH CO.**

ATLANTA, GA.

## SPINNING RINGS Best Quality Guaranteed

Also Manufacturers of Drop Wires

The Connecticut Mill Supply Co.,

Torrington, Connecticut

Southern Representatives, PEARSON & RAMSAUR, Greenville, S. C.

## WIRE US FOR GARLAND MENDING EYES

*When In Urgent Need*

We carry a large stock of mending eyes for loom harnesses and can promptly furnish any size desired. The eyes are of exactly the same size of twine and shape as the harnesses on which they would be used and will weave as well and wear as long as the harness itself.



**GARLAND MFG. CO.**

Saco, Maine

## SOLUBLE SIZING TALLOW



**T**HIS PREPARATION is simply raw beef tallow made soluble. In view of the fact that raw tallow will not dissolve and hence does not combine with starches, we herein offer an article that avoids these objectionable features. Soluble Sizing Tallow dissolves and combines readily with all starches and acts as a most valuable softening agent. Users of this article will avoid the danger of mildewed warps and also the disagreeable odor of Raw Tallow in the goods. In short, an excellent softening agent.

**ARABOL MANUFACTURING CO.**

100 William Street, New York

CAMERON MacRAE Southern Sales Agent CHARLOTTE, N. C.



## Want Department

### Want Advertisements.

If you are needing men for any position or have second hand machinery, etc., to sell, the want columns of the *Southern Textile Bulletin* afford a good medium for advertising the fact.

Advertisements placed with us reach all the mills.

### Employment Bureau.

The Employment Bureau is a feature of the *Southern Textile Bulletin* and we have better facilities for placing men in Southern mills than any other journal.

The cost of joining our employment bureau is only \$1.00 and there is no other cost unless a position is secured, in which case a reasonable fee is charged.

We do not guarantee to place every man who joins our employment bureau, but we do give them the best service of any employment bureau connected with the Southern textile industry.

### Warper Tender Wanted.

Job now open for first class warp yarns from 10s to 16s single warps, steady employment six warper on denn warper. On days per week. Pays \$1.50 per day. Address No. 1033, care Southern Textile Bulletin.

### Beamer Wanted.

Wanted at once—  
Two first class pattern beamers  
Two first class pattern beamers  
One first class machinist.  
Pay \$12.00 per week for each.  
Men with family preferred.  
J. B. Boyd, Supt.,  
Patterson Mills,  
Roanoke Rapids, N. C.

### Section Men Wanted.

Want two section men on Howard & Bullough spinning. Pay \$1.40 per day. None but hustlers need apply. Address "Section," care Southern Textile Bulletin.

### Salesman Wanted

Want first-class salesman for Sizing Compound, Soap Powders and Boiler Compound. None but sober, reliable men need apply. Send references with first letter. Address Sizing, care Southern Textile Bulletin.

WANT position as superintendent. Now employed and giving satisfaction but want larger mill. Have had wide experience and can furnish good references. Address No. 492.

WANT position as overseer of cloth room. Have 14 years experience on exports, domestics, sheetings, drills, fancies and satens. Can furnish necessary references as

to ability and character. Address No. 494.

WANT position as superintendent. Now employed and giving of yarn mill or carder and spin-satisfaction but want larger job. Good references. Address No. 495.

WANT position as overseer of spinning. Experienced on both fine and coarse numbers and can handle large room. Good experience and fine references. Address No. 496.

WANT position as superintendent of small mill or overseer of carding. Long experience as carder. Age 34. Married. Strictly sober and attend to business. Good references. Address No. 497.

WANTED position by a married man, 33 years old, as overseer of carding in some good mill in N. C. Am now employed, but want better job. Have had four years' experience as overseer. 19 years in mill. Can furnish good references from past and present employers. Address No. 498.

WANT position as overseer weaving. Have had ten years' experience as overseer. Have run some big jobs. Nothing less than \$2.50 per day considered. Good references. Address No. 499.

WANT position as superintendent. Have had long experience, especially on fine combed yarns. Can furnish best of references and can give satisfaction. Address No. 500.

WANT position as superintendent. Have long experience both as overseer of spinning and as superintendent. Can furnish references from former employers. Prefer weaving mill. Address No. 501.

WANT position as master mechanic. 23 years experience. Strictly sober. Good references from present and past employers. Have family of spinners and doffers. Have seldom changed positions. Address No. 502.

WANT position as superintendent of yarn mill or overseer of spinning in large mill. Age 23. Married. Strictly sober with no bad habits. Can furnish best of references as to ability and character. Address No. 503.

WANT position as superintendent or overseer of spinning. Now employed in large mill and giving satisfaction but prefer to change. Good references. Address No. 504.

WANT position as overseer of weaving. Long experience, 11 years on last job. Age 35. Can

furnish good references both as to character and ability. Address No. 505.

WANT position as overseer spinning twisting or winding. Have had long experience and can give good references. Now employed. Address No. 506.

WANT position as superintendent. Have had long experience and can secure production. Good references. Now employed, but want better position. Address No. 508.

WANT position as superintendent of small mill or carder and spinner in a large mill. Have had long experience and given satisfaction. Am a textile graduate. Address No. 509.

MANUFACTURING Chemist, making Softeners, Sizing and Finishing Compounds is open for engagement with a Sizing material concern or will act as Maker for Manufacturing concern. Starch expert and good salesman. Practical sizer on Cottons and Worsteds, English experience. Address No. 510.

JOB WANTED as overseer in large card room or assistant superintendent. Now employed as superintendent of small mill, but would change for larger job. Good references and long experience. Address No. 511.

WANT position as superintendent of medium sized mill or overseer of spinning in large mill. Have had long practical experience and can furnish excellent references. Address No. 512.

WANT position as overseer carding at not less than \$3.00 per day. Have had 15 years experience in card room. 4 years as overseer. 29 years old. Married. Can give good references. Address No. 513.

WANT position as carder or spinner or superintendent. Would accept job at \$3.00 per day. Can take job at once. Good references and long experience. Address No. 514.

WANT position as overseer carding with a first-class mill at \$3.50 or \$4.00 per day. Long experience. Can give good references. Address No. 515.

WANT position as carder or spinner or both by a young married man. Strictly sober and good manager of help. Best of references by past employers. Production guaranteed or know the reason why. Address No. 516.

WANT position as superintendent. Have had long experience and am entirely competent. Can furnish satisfactory references and will give satisfaction. Address No. 517.

WANT position as superintendent. Have had long experience and given entire satisfaction. Reason for changing is for better salary.

## PATENTS

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Send your business direct to Washington. Saves time and insure better service.

Personal Attention Guaranteed  
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Patent Lawyers

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45 years old. Married. Member of church, strictly sober. My experience has been from the ground up on both white and colored work. Address No. 518.

WANT position as overseer carding. 24 years experience in carding. Married. Sober. Good references. Can change on short notice. Address No. 519.

WANT position as superintendent or overseer carding or carder and spinner. Good references both as to character and ability. Address No. 520.

WANT position as overseer carding at not less than \$3.00 per day. Can give good references and can change on week's notice. Address No. 521.

WANT position as superintendent of spinning mill by practical man with 22 years experience in spinning. Am at present spinner in 50,000 spindle plant. Have been with present employers for eight years. Address No. 522.

WANT position as superintendent at not less than \$1,500. Now employed and giving satisfaction, but prefer a more modern mill. Can furnish the best of references. Address No. 523.

WANT position as overseer of carding at not less than \$2.50 per day. Have had long experience and can furnish best of references. Address No. 524.

WANT position as overseer weaving. I am an overseer of long experience on different classes of goods, both plain and fancies. Address No. 525.

WANT position as carder or spinner, or both, or superintendent of small mill. Have had 15 years' experience as practical mill man. Address No. 526.

WANT position as overseer of carding or carding and spinning in small mill. S. C. or N. C. preferred. 45 years experience. Age 44. Now employed. Would accept \$3 per day. Address No. 527.

WANT position as master mechanic. Have had long experience. Now employed and giving satisfaction but want larger job. Address No. 528.

(Continued on next page)



(Continued from last page)

WANT position as overseer of weaving. 23 years experience. Good references. Now employed. Have run large room. Age 45. Prefer room with Draper looms. Address No. 529.

WANT position as overseer of spinning or winding at not less than \$2.50 per day. 17 years experience. Have also taken textile course. Can furnish good references. Address No. 530.

WANT position as superintendent of yarn mill or carder and spinner. Have had long experience and can furnish good references. Would like to correspond with mill needing first-class man. Address No. 531.

WANT position as overseer of carding at not less than \$3.00. Have held present job 2 years and am giving satisfaction, but prefer to change. Good references from present and former employers. Address No. 532.

WANT position as overseer of dyeing. Have had 23 years' experience on warp and raw stock dyeing. 4 years' experience sizing warps. Have three hands besides myself. Address No. 533.

WANT position as superintendent of 5,000 or 10,000-spindle yarn mill or carder and spinner in large mill. Can furnish best of references. Age 35. Have been with present mill 6 years. Address No. 534.

WANT position as carder or spinner, or both, in a small mill. Have 10 years experience as overseer of carding and spinning. Married. Strictly sober. Now employed. Good references. Address No. 535.

WANT position as overseer of spinning, spooling, warping and twisting. Have 15 years experience. Middle aged. Married. Can furnish best of references. Address No. 536.

WANT position as overseer of carding and spinning. 4 years experience in card room. 13 years as overseer spinning. Good reason for wanting to change. Good references. Address 537.

WANT position as superintendent. Have had many years experience and can furnish first-class references from former employers. Sober, reliable and good manager of help. Address No. 538.

WANT position as carder or spinner or both. Am practical mill man of long experience and can furnish as reference present and former employers. Address No. 539.

WANT position as master mechanic. Have had wide experience with cotton mill plants and general repair work. Have first class engineer license. Am strictly sober and attend to business. Address No. 540.

WANT position as overseer of spinning in large mill or superintendent of small mill. Have had long experience and can furnish good references. Address No. 541.

WANT position as overseer of weaving. Have had long experience on both white and colored work and can furnish first-class references. Address No. 542.

WANT position as overseer of spinning or weaving at not less than \$3.00 per day. Can furnish best of references for either place. Prefer North or South Carolina. Address No. 543.

WANT position as overseer of carding. 31 years old. Married. Good habits and a hustler for production. Only reason for wanting to change is larger job. Can give good references. Address No. 544.

WANT position as overseer of weaving. 14 years' experience as fixer and overseer. Age 32. Strictly sober. I. C. S. graduate. Fine references. Address No. 545.

WANT position as superintendent in small mill or carder in large mill. Can give A 1 references. Age 39. 25 years mill experience. Held last job for six years. Address No. 546.

WANT position as traveling representative for a mill supply house or for a line of textile books or journals. Have good experience and can furnish good references. Address No. 547.

WANT position as carder or spinner on either white or colored work, either coarse or fine. Have experience on warping, twisting, etc. 12 years as overseer. Good references. Address No. 548.

WANT position as overseer of spinning. Have had long experience on both coarse and fine work. Can furnish satisfactory references. Address No. 549.

WANT position as overseer of carding in small mill or second hand in a large mill. Am now employed but prefer to change. Good references. Address No. 550.

WANT position as overseer of carding. Held last job three years and gave satisfaction. Can furnish satisfactory references. Address No. 551.

WANT position as superintendent. Now employed and giving satisfaction, but desire larger mill. Can furnish best of references. Address No. 553.

WANTED position as carder, spinner or superintendent. 20 years practical experience as overseer and superintendent. Can change on short notice. Good references. Address No. 554.

WANT position as master mechanic. Have had 30 years' experience as engineer and master mechanic. Would like to correspond with mill in need of such a man. Address No. 555.

WANT position as superintendent, assistant or overseer of weaving by a Northern man. 40 years of age. Married, moral and strictly temperate. 28 years experience on nearly all grades of cotton goods—plain or fancies, white or colored. Good spinner. Expert weaver, and textile graduate. 3 years in present position. Salary no object the first year. Three workers in family. Best of references. Address No. 552.

WANT position as overseer of weaving. Prefer print goods. Believe in looking out for production, quantity and quality at lowest cost. Have family. Present employers as references. Address No. 556.

WANT position as superintendent of small mill or overseer of spinning in large mill. Now employed as spinner and assistant superintendent and giving satisfaction. Good references. Address No. 557.

WANT position as superintendent or overseer of carding in large mill. Experienced on both white and colored goods. Satisfactory references. Address No. 558.

WANT position as superintendent of either yarn or weave mill. Have had long experience. Held present job three years. Good references. Address No. 559.

WANT position as overseer of carding. Now employed but want larger room. Have good experience in first-class mills and can furnish good references. Address No. 560.

#### Prosperous Year in Northern China (Continued from Page 3)

as possible. As the nuts were not ripe, in many cases the hulls adhered to them, and had to be torn off by hand. This left stains on the shells, and some chemical preparation containing sulphuric acid was used to bleach the exterior. This found its way at the joint between the two halves of the shell, and often injuriously affected the kernels. Then, many of the kernels, being in the milk, dried up, leaving nothing but the black skin in which they had been contained, while those at a greater stage of development decayed. The net result was great losses on the part of merchants who had engaged in the trade without taking proper precautions as to the quality of the nuts which they were shipping; while the buyers in the United States, bitterly disappointed and suffering severe losses, abandoned the trade. These facts account fully for the diminution in the export of this article.

The export cotton trade has been largely facilitated by the adoption of an official test for water, and

## Chance for Knitting Mill Man

In an East Tennessee town local capital has been subscribed for a knitting mill. The parties behind the enterprise want a capable manager and superintendent for the plant who will invest some money in stock.

There is a good supply of available labor, women and girls, many of whom are already trained.

If interested write.

### M. V. RICHARDS

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SOUTHERN RAILWAY  
Room 129 Washington, D. C.

other adulterants. The testing house is in the hands of the native customs, through whose office all inland cargo must pass. Regulations for testing were adopted by the General Chamber of Commerce, received the approval of the diplomatic body in Peking and were agreed to by the Chinese government. The benefit to the trade is shown by the large quantity in November, 1912, and was the subject of a report by this office. (See Daily Consular Trade Reports for January 30, 1913.)

During the year there was a very strong demand from the United States for gray goatskins and goat-1,170,854, and a total number of entrances and clearances of 1,815 vessels, a shortage of 372 compared with 1911. This decrease was due to two factors: First, in 1911 there was an abnormal demand for vessels to carry salt to ports on the Yangtze River; second, in 1912 no tribute rice was sent from the south to the capital. This condition will continue and must be considered in comparing the trade of Tientsin in future years with that of the past.

Through the courtesy of local brokers, this consulate has been furnished with a chart showing the fluctuations of the exchange market for 1912. (This chart will be loaned by the Bureau of Foreign and Domestic Commerce.) The highest point reached by bar silver was 29 11-16d. (60.19 cents) per ounce in December, and the lowest point was 25 1-8d. (50.94 cents) per ounce in January.

The highest point for bank telegraphic transfers on London was 3s. 15-16d. (74.86 cents) in December, and the lowest 2s. 72-1d. (64.38 cents) in January.

The foreign population of all nationalities in the various concessions at Tientsin numbers 3,944, of whom 2,175 are Japanese. Over 95,000 Chinese live in the various concessions.—Consular Reports.



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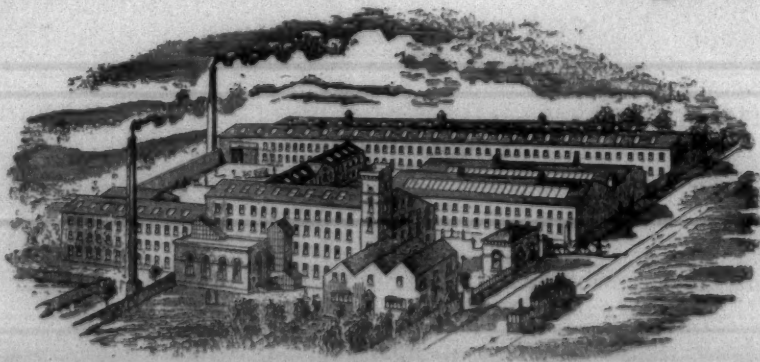
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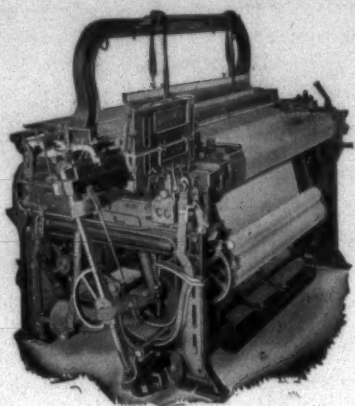
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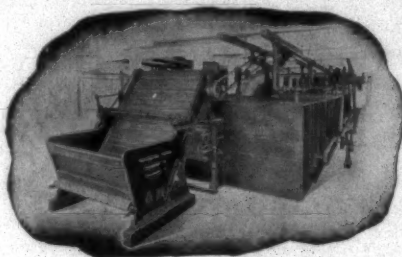
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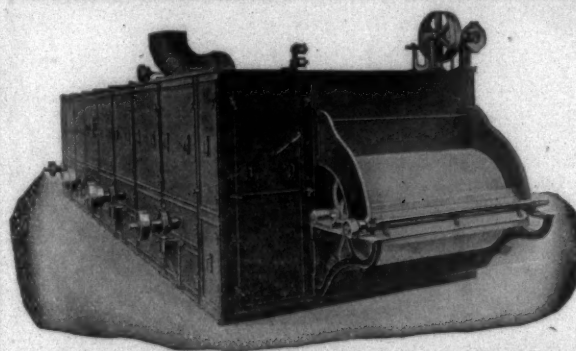


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